**CHAPTER -1**

**BASIC COMPUTER OPERTION**

***COMPUTER :*** The computer word comes from the Greek word `compute’. It is an electronics device which converts raw data into meaningful information with the help of stored instruction.

In other terms it can be called as a device which takes input and gives us output under the control of set of instruction called a programme.

***IDENTIFICATION OF DIFFERENT COMPONENTES OF COMPUTER***

**KEYBOARD** : It is an input device. The keyboard allows the user to intract with the computer directly. Keyboard reassembled an electronic type writer. Keyboard has some special function keys(F1,F2………F12) Escape key (ESC) , Caps lock keys, Tab keys, Shift keys, Control keys , Alt keys and Enter keys etc.

**MOUSE** : It is an input device which used to point and select on the VDU/Monitor. A mouse may have 1, 2, 3 buttons. The function of each button is determined by the programme that uses the mouse. A mouse can be classified as optical or mechanical mouse depends upon the basic technology.

**MONITOR**: The most commonly used output devices is VDU (video display unit). It is used to display information on the screen. The information modes are text mode on graphical mode.

**CPU**: (CENTRAL PROCEESING UNIT): It is the brain of computer where all data’s should manipulate with specified instruction then it display output. It also controls the input, output and storage devices. The CPU is divided into 3 basic parts.

1. Memory Unit
2. Control Unit
3. ALU(Arithmetic and logic unit)
4. Memory unit : It is called the main storage unit where we can store the data temporarily or permanently.
5. Control unit: - It is the central nervous system of computer, which control, maintain order or direct the operation of the entire system. It also control the input output(I/0) devices
6. ALU : It performs the arithmetical calculation and logical decision. It also manipulated the data like addition, multiplication, subtraction and division.

**STEP TO SWITCH ON THE COMPUTER**

1. Switch on the power switch from the switch board.
2. Switch on UPS.
3. Switch on the CPU.
4. Switch on the monitor.

**BOOTING PROCESS**

The process to activate the machine from dead stage to active stage called booting.

**STEPS FOR BOOTING**

1. The power switch for the computer should be ON.
2. The BIOP (basic input output process) programme present in the ROM gets active.
3. The BIOP programme checks for the available memory and all attached peripheral devices like CD,TAPE, etc. This process is termed as POST (power on self test). In case of any fault in them it is pointed out by either a sequences of beep on error message on the screen. The BIOP is read into RAM during system initialization.
4. The BIOP looks for presence of small programme on 1st sector (sector 0) of 1st track (track 0) on the floppy disk (drive A) on the hard disk (drive c) loads it into memory. This programme is called the boot programme or boot strap loader. If the boot programme is not found the floppy disk or hard disk is not recognize for use under MS DOS an error message is display accordingly.
5. This programme searches for the operating system and copy them into the memory. In DOS, operating system, 1st it load msdos.sys and io.sys into the memory and then the command.com. In case this programme are not found in bootable disk an error message is display. It indicate that the disk was a non system disk and requesting for inserting new disk with operating system.
6. Cold boot
7. Worm boot (ctrl + del + alt)

**STEP TO SHUT DOWN THE COMPUTER**

1. Press alt+f4 key simultaneously, select shut down option and click on ok.

 Or

Press the windows key from the keyboard or move the mouse pointer to the extreme right corner of the screen i.e. just above the taskbar, click on setting, click on power, click on shut down.

Front panel

  

**Chapter -2**

**PERSONAL COMPUTER SYSTEM**

**Mother Board**

A Computer Motherboard is commonly known as Main board or MB or System board or logic board is designed on PCB (Printed Circuit Board).That holds or connects all components and parts together on a single sheet. The Computer Motherboard holds all the circuitry to connect the various components of a computer system. Therefore it is also called as backbone of [Personal computer system](https://www.chtips.com/computer-fundamentals/what-is-a-computer). The Main board or Motherboard is the main, cruical and important part of the computer system. It holds many important components such as [Computer memory](https://www.chtips.com/computer-fundamentals/what-is-a-computer-memory) slots, cpu, sata IDE slots, expansions slots(PCI,AGP etc),capacitor’s, resistor’s ,BIOS chip etc The Computer main board is made up of thin sheet of non conductive material from plastic.

The motherboard may be characterized by the

1. Form factor
2. Chipset
3. Processor socket

Form factor : It refers to the motherboard’s geometry, dimensions, arrangement and electrical requirements. Advanced Technology Extended (ATX) is the most common design of motherboard for desktop computers.

Chipset : It is a circuit, which is used to controls the of resources such as the bus interface with the processor, cache memory and RAM, expansion cards, etc. It used to coordinate data transfers between the various components of the computer.

The processor socket : It is a connector into which the processor is mounted. The Basic Input Output System (BIOS) and Complementary Metal – Oxide semiconductor (CMOS) are present on the motherboard.

Components of Motherboard

1. PCI Slot – Thos board has 2 PCI solts. These can be used for components such as Ethernet cards, sound cards, and modems.
2. PCI-E 16x Slot – There are 2 of them on this motherboard diagram, both are blue. These are used for your graphics card. With two of them onboard, you can run 2 graphics cards in SLI. You would only need this if you are a gamer, or working with high end video / graphics editing. These are the 16x speed versions, which are currently the fastest.
3. PCI-E 1x Slot – Single slot – In the PCI e 1x generation, each lane (1 x) carries 250 MB/s compared to 133 MB/s for the PCI slots. These can be used for expansion cards such as Sound cards, or Ethernet cards.
4. Northbridge – This is the Northbridge for this motherboard. This allows communication between the CPU and the system memory and PCI-E slots.
5. ATX 12V 2x and 4 Pin power connection – This is one of two power connections that supply power to the motherboard. This connection will come from your Power Supply.
6. CPU – Fan Connection – This is where your CPU fan will connect. Using this connection over one from your power supply will allow the motherboard to control the speed of your fan, based on the CPU temperature.
7. Socket – This is where your CPU will plug in. The orange bracket that is surrounding it is used for high end heat sinks. It helps to support the weight of the heat sink.
8. Memory slots – These are the slots for your RAM. Most boards will have 4 slots, but some will only have 2. The color coding you see on the motherboard diagram is used to match up RAM for Dual-Channel. Using them this way will give your memory a speed boost.
9. ATX Power connector – This is the second of two power connections. This is the main power connection for the motherboard, and comes from the power supply.
10. IDE connection – The IDE(Integrated Drive Electronics) is the connection for your hard drive or CD / DVD drive. Most drives today come with SATA connections, so you may not use this.
11. Southbridge – This is the controller for components such as the PCI slots, onboard audio, and USB connection.
12. SATA connections – These are 4 of the 6 SATA connections on the motherboard. These will be used for hard drives, and CD / DVD drives.
13. Front Panel connections – This is where you will hook in the connections from your case. These are mostly the different lights on your case, such as power on , hard drive activity etc.
14. FDD connection – The FDD is the floppy Disk controller. If you have a floppy disk drive in your computer, this is where you will hook it up.
15. External USB connections – This is where you will plug in external USB connections for your case or USB bracket.
16. CMOS battery – This is the motherboard’s battery. This is used to allow the CMOS to keep it settings.

Types of ports and connectors

|  |  |
| --- | --- |
| component of motherboard Keyboard port | **Keyboard & Mouse :** This Port is used to connect keyboard and mouse , now a day we use USB connector for keyboard and mouse |
|  component of motherboard serial port |  **Serial or COM :** It used to connect some types of modem, scanner, or digital camera |
|  component of motherboard parallel Port | **Parallel or Printer** : You plug your printer into the parallel, or printer, port. But now printers may use a USB port |
|  component of motherboard USB port | **USB :** Designed to replace older Serial and Parallel ports, the USB (Universal Serial Bus) can connect computers with a number of devices, such as printers, keyboards, mice, scanners, digital cameras, PDAs, and more |
|  component of motherboard monitor Port |  **Video or Monitor** : It used to connect your monitor into the video port |
|  component of motherboard Line Out |  **Line Out** : It used to connect speakers or headphone into the Line Out jack |
|  component of motherboard line IN | **Line In** : The Line In jack allows you to listen to your computer using a stereo system |
|  component of motherboard microphone port |  **Microphone** : It used to connect a microphone into this jack to record sounds on your computer |
|  component of motherboard JoyStick |  **Joystick or Game** : If you have a joystick, musical (MIDI) keyboard, or other gaming device, this is where you plug it in |
|  component of motherboard Phone or Modem port |  **Phone or Modem** : The phone or modem jack is where you plug your computer into a phone line |
|  component of motherboard LAN port |  **Network or Ethernet** : You can connect your computer to a network by plugging in an Ethernet cable in this port |
|  component of motherboard Printer Port |  **SCSI** : It used to connect a hard drive, CD-ROM drive, or other device to a computer |

**Chapter - 3**

**COMPUTER LAB SAFETY AND STUDY OF LAB TOOLS**

***Lab Safety Measures***

Safety guidelines help protect individuals from accidents and injury. They also help to protect equipment from damage. Some of these guidelines are designed to protect the environment from contamination caused by improperly discarded materials.

1. **General Safety**

Safe working conditions help prevent injury to people and damage to computer equipment. A safe workspace is clean, organized, and properly lighted. Everyone must understand and follow safety procedures.

Follow the basic safety guidelines to prevent cuts, burns, electrical shock, and damage to eyesight. As a best practice, make sure that a fire extinguisher and first-aid kit are available in case of fire or injury. Poorly placed or unsecured cables can cause tripping hazards in a network installation. Cables should be installed in conduit or cable trays to prevent hazards.

**CAUTION**

This is a partial list of basic safety precautions to use when working on a computer:

* Remove your watch and jewelry and secure loose clothing.
* Turn off the power and unplug equipment before performing service.
* Cover sharp edges inside the computer case with tape.
* Never open a power supply or a CRT monitor.
* Do not touch areas in printers that are hot or that use high voltage.
* Know where the fire extinguisher is located and how to use it.
* Keep food and drinks out of your workspace.
* Keep your workspace clean and free of clutter.
* Bend your knees when lifting heavy objects to avoid injuring your back.
1. **Electrical Safety**

Follow electrical safety guidelines to prevent electrical fires, injuries, and fatalities in the home and the workplace. Power supplies and CRT monitors contain high voltage.

**CAUTION**

* Do not wear the antistatic wrist strap when repairing power supplies or CRT monitors. Only experienced technicians should attempt to repair power supplies and CRT monitors.
* Some printer parts become hot during use, and other parts might contain high voltage. Check the printer manual for the location of high-voltage components. Some components retain a high voltage even after the printer is turned off. Make sure that the printer has had time to cool before making the repair.
* Electrical devices have certain power requirements. For example, AC adapters are manufactured for specific laptops. Exchanging power cords with a different type of laptop or device may cause damage to both the AC adapter and the laptop.
1. **Fire Safety (2.1.1.3)**

Follow fire safety guidelines to protect lives, structures, and equipment. To avoid an electrical shock and to prevent damage to the computer, turn off and unplug the computer before beginning a repair.

Fire can spread rapidly and be very costly. Proper use of a fire extinguisher can prevent a small fire from getting out of control. When working with computer components, be aware of the possibility of an accidental fire and know how to react. Be alert for odors emitting from computers and electronic devices. When electronic components overheat or short out, they emit a burning odor. If there is a fire,

**CAUTION**

follow these safety procedures:

* Never fight a fire that is out of control or not contained.
* Always have a planned fire escape route before beginning any work.
* Get out of the building quickly.
* Contact emergency services for help.
* Locate and read the instructions on the fire extinguishers in your workplace before you have to use them.

Be familiar with the types of fire extinguishers used in your country or region. Each type of fire extinguisher has specific chemicals to fight different types of fires:

* Paper, wood, plastics, cardboard
* Gasoline, kerosene, organic solvents
* Electrical equipment
* Combustible metals

It is important to know how to use a fire extinguisher. Use the memory aid P-A-S-S to remember the basic rules of fire extinguisher operation:

* **P:** Pull the pin.
* **A:** Aim at the base of the fire, not at the flames.
* **S:** Squeeze the lever.
* **S:** Sweep the nozzle from side to side.

**Analysis of various Power Fluctuation Types(Blackout, Brownout, Noise, Spike)**

During a **brownout** the voltage drops to such an extent that it typically causes the lights to dim and causes computers to shut off. A **blackout** is when a total loss of**power** for a prolonged period occurs. Another problem associated with **blackouts** is the **spike** that can occur when **power** is restored.

Voltage is a measure of work required to move a charge from one location to another. The movement of electrons is called current. Computer circuits need voltage and current to operate electronic components. When the voltage in a computer is not accurate or steady, computer components might not operate correctly. Unsteady voltages are called power fluctuations.

The following types of AC power fluctuations can cause data loss or hardware failure:

* **Blackout** - Complete loss of AC power. A blown fuse, damaged transformer, or downed power line can cause a blackout.
* **Brownout** - Reduced voltage level of AC power that lasts for a period of time. Brownouts occur when the power line voltage drops below 80 percent of the normal voltage level. Overloading electrical circuits can cause a brownout.
* **Noise** - Interference from generators and lightning. Noise results in poor quality power, which can cause errors in a computer system.
* **Spike** - Sudden increase in voltage that lasts for a short period and exceeds 100 percent of the normal voltage on a line. Spikes can be caused by lightning strikes, but can also occur when the electrical system comes back on after a blackout.
* **Power surge** - Dramatic increase in voltage above the normal flow of electrical current. A power surge lasts for a few nanoseconds, or one-billionth of a second.

***Power Protection Devices***

To help shield against power fluctuation problems, use devices to protect the data and computer equipment:

* **Surge suppressor**- Helps protect against damage from surges and spikes. A surge suppressor diverts extra electrical voltage that is on the line to the ground.
* **Uninterruptible power supply (UPS)** - Helps protect against potential electrical power problems by supplying a consistent level of electrical power to a computer or other device. The battery is constantly recharging while the UPS is in use. The UPS provides a consistent quality of power when brownouts and blackouts occur. Many UPS devices can communicate directly with the computer operating system. This communication allows the UPS to safely shut down the computer and save data prior to the UPS losing all electrical power.
* **Standby power supply (SPS)** - Helps protect against potential electrical power problems by providing a backup battery to supply power when the incoming voltage drops below the normal level. The battery is on standby during normal operation. When the voltage decreases, the battery provides DC power to a power inverter, which converts it to AC power for the computer. This device is not as reliable as a UPS because of the time it takes to switch over to the battery. If the switching device fails, the battery cannot supply power to the computer.

***Procedures for proper******Disposal or recycling of computer components***

#### Equipment Disposal (2.1.3.2)

The proper disposal or recycling of hazardous computer components is a global issue. Make sure to follow regulations that govern how to dispose of specific items.

Organizations that violate these regulations can be fined or face expensive legal battles. Regulations for the disposal of the items on this page vary from state to state and from country to country. Check your local environmental regulation agency.

##### **Batteries**

Batteries often contain rare earth metals that can be harmful to the environment. Batteries from portable computer systems can contain lead, cadmium, lithium, alkaline manganese, and mercury. These metals do not decay and remain in the environment for many years. Mercury is commonly used in the manufacturing of batteries and is extremely toxic and harmful to humans.

Recycling batteries should be a standard practice. All batteries, including lithium-ion, nickel-cadmium, nickel-metal hydride, and lead-acid, are subject to disposal procedures that comply with local environmental regulations.

##### **Monitors**

Handle CRT monitors with care. Extremely high voltage can be stored in CRT monitors, even after being disconnected from a power source.

Monitors contain glass, metal, plastics, lead, barium, and rare earth metals. According to the U.S. Environmental Protection Agency (EPA), monitors can contain approximately 4 pounds (1.8 kg) of lead. Monitors must be disposed of in compliance with environmental regulations.

##### **Toner Kits & Cartridges**

Used printer toner kits and printer cartridges must be disposed of properly in compliance with environmental regulations. They can also be recycled. Some toner cartridge suppliers and manufacturers take empty cartridges for refilling. Some companies specialize in refilling empty cartridges. Kits to refill inkjet printer cartridges are available but are not recommended, because the ink might leak into the printer, causing irreparable damage. Using refilled inkjet cartridges might also void the inkjet printer warranty.

##### **Chemical Solvents and Aerosol Cans**

Contact the local sanitation company to learn how and where to dispose of the chemicals and solvents used to clean computers. Never dump chemicals or solvents down a sink or dispose of them in a drain that connects to public sewers.

The cans or bottles that contain solvents and other cleaning supplies must be handled carefully. Make sure that they are identified and treated as special hazardous waste. For example, some aerosol cans explode when exposed to heat if the contents are not completely used.

***Study of General Lab Tools***

### Hardware Tools

A toolkit should contain all the tools necessary to complete hardware repairs. Hardware tools are grouped into four categories:

* **ESD tools**
* **Hand tools**
* **Cleaning tools**
* **Diagnostic tools**

#### ESD Tools

There are two ESD tools : The antistatic wrist strap and the antistatic mat. The antistatic wrist strap protects computer equipment when grounded to a computer chassis. The antistatic mat protects computer equipment by preventing static electricity from accumulating on the hardware or on the technician.

#### Hand Tools

Most tools used in the computer assembly process are small hand tools. They are available individually or as part of a computer repair toolkit. Some common hand tools and their uses are:

* **Flat-head screwdriver:** Used to tighten or loosen slotted screws.
* **Phillips-head screwdriver:** Used to tighten or loosen cross-headed screws.
* **Torx screwdriver:** Used to tighten or loosen screws that have a star-like depression on the top, a feature that is mainly found on laptops.
* **Hex driver:** Used to tighten or loosen nuts in the same way that a screwdriver tightens or loosens screws (sometimes called a nut driver).
* **Needle-nose pliers:** Used to hold small parts.
* **Wire cutters:** Used to strip and cut wires.
* **Tweezers:** Used to manipulate small parts.
* **Part retriever:** Used to retrieve parts from locations that are too small for your hand to fit.
* **Flashlight:** Used to light up areas that you cannot see well.
* **Wire stripper:** A wire stripper is used to remove the insulation from wire so that it can be twisted to other wires or crimped to connectors to make a cable.
* **Crimper:** Used to attach connectors to wires.
* **Punch-down tool:** Used to terminate wire into termination blocks. Some cable connectors must be connected to cables using a punch down tool.

#### Cleaning Tools

Having the appropriate cleaning tools is essential when maintaining and repairing computers. Using the appropriate cleaning tools helps ensure that computer components are not damaged during cleaning. Cleaning tools include the following:

* **Soft cloth:** Used to clean different computer components without scratching or leaving debris
* **Compressed air:** Used to blow away dust and debris from different computer parts without touching the components
* **Cable ties:** Used to bundle cables neatly inside and outside of a computer
* **Parts organizer:** Used to hold screws, jumpers, fasteners, and other small parts and prevents them from getting mixed together

#### Diagnostic Tools

Diagnostic tools are used to test and diagnose equipment. Diagnostic tools include the following:

* **Digital Multimeter** : It is a device that can take many types of measurements. It tests the integrity of circuits and the quality of electricity in computer components. A digital multimeter displays the information on an LCD or LED.
* **Loopback adapter :**, It is also called a loopback plug, tests the basic functionality of computer ports. The adapter is specific to the port that you want to test.
* **Toner probe**: It is a two-part tool. The toner part is connected to a cable at one end using specific adapters, such as an RJ-45, coaxial, or metal clips. The toner generates a tone that travels the length of the cable. The probe part traces the cable. When the probe is in near proximity to the cable to which the toner is attached, the tone can be heard through a speaker in the probe.

### B) Software Tools

### Like hardware tools, there are a variety of software tools that can be used to help technicians pinpoint and troubleshoot problems. Many of these tools are free and several come with the Windows operating system.

#### Disk Management Tools

Disk management is used to manage the drives installed in a computer like hard drives (internal and external) , optical disk drives and flash drives. It can be used to partition drives , format drives, assign drive letters and much more.

The following are some disk management tools:

* **FDISK:** A command-line tool that creates and deletes partitions on a hard drive. The FDISK tool is not available in Windows XP, Vista, or 7. It has been replaced with the Disk Management tool.
* **Disk Management Tool:** Initializes disks, creates partitions, and formats partitions.
* **Format:** Prepares a hard drive to store information.
* **ScanDisk or CHKDSK:** Checks the integrity of files and folders on a hard drive by scanning the file system. These tools might also check the disk surface for physical errors.
* **Defrag:** Optimizes space on a hard drive to allow faster access to programs and data.
* **Disk Cleanup:** Clears space on a hard drive by searching for files that can be safely deleted.
* **System File Checker (SFC):** A command-line tool that scans the operating system critical files and replaces files that are corrupted.

**Chapter – 4**

**OPERATING SYSTEM**

**MS DOS (Microsoft disk operating system)**

It is a non-graphical command line operating system which was introduce by Microsoft in August 1981. It is the first widely install in personal computer in the 1980s.

* It is character user interface software (CUI).
* It is a single user single task is operating system.
* It is less powerful or a slow operating system.
* All commands have to be typed at the DOS prompt by using keyboard only.
* It does not support graphics.
* It is not having the plug and play facility to assign a new device.
* The DOS is having 3 system file that is IO.SYS, MSDOS.SYS, COMMAND.COM.
* IO.SYS and MSDOS.SYS are hidden file where as COMMAND.COM is unhidden file.

**DOS** is having mainly two types of command. That is Internal and External Command.

**Internal command:** All internal command are stored in one file called command.com and it is automatically loaded into RAM or memory when the machine is switch on. This is called RAM resident command which is resides in computer memory till the machine is switch on. Some internal commands are DATE, TIME, CLS, VER, VOL, EXIT, COPY CON <FILE NAME>, DIR, COPY, REN, TYPE, DEL, MD, CD, RD, WILD CARDS etc.

**External command:**

1. These commands are present in independent files in the external file storage disk.
2. These are called disk resident commands.
3. When an external command is called MSDOS locates this command on disk loads in its memory then it gets executed.
4. If a command is split wrongly or if an external command files is missing DOS will display an error message. Some of the external command are TREE, FORMAT, MOVE, EDIT,etc.

**File:** File is collection of data information.

**Directory:** Directory is a collection of several types of files.

**Rules of file name**

* In DOS the file name is divided into two sections that is primary name and extension name.
* The Primary name and extension name is divided by a DOT symbol (.).
* The maximum length of primary name is eight characters and the extension name is three characters.
* No space, no punctuation marks are allowed in between file name.
* The first letter must be an alphabet and rest of the name is numeric.
* The primary name is compulsory where as the secondary name is optional.

**COMMANDS**

**Internal commands**

**1. DATE: -** It is used to display the current system date and also to enter the new date.

 Syntax- DATE

**Example- C :\> DATE** 

 **Output-** The current date is: 26-12-18

 Enter the new date: (DD-MM-YY)

**2. TIME: - It** is used to display the current system time and also to enter the new time.

 Syntax- TIME

**Example- C :\> TIME **

**Output-**The current time is: 22:01:25.82

 Enter the new time:

**3. CLS: -** It is used to clear the data.

 Syntax- CLS

**Example- C :\> CLS **

**. VER: -** It is used to display the version number of OS.

 Syntax- VER

**Example- C :\> VER **

**Output-**Microsoft windows [Version 10.0.16299.309]

**5. VOL: -** It is used to display the external volume label name of the disk.

 Syntax- VOL

**Example- C :\> VOL **

**Output-**Volume in drive C is WINDOW

 Volume Serial Number is 7E45-2035

**6. COPY CON: -** It is used to create a file.

 Syntax- COPY CON <File name>

 Data’s for saving the file **Ctrl+z or** F6**.**

**Example- C :\> COPY CON Document **

 Notes of a skdav. ^z ****

 **Output- 1 file<5>copied.**

**7. DIR: -** It is used to display the directory listing of a specified drive.

 Syntax- DIR

**Example- C :\> DIR **

 Volume is drive C is WINDOWS

 Volume serial number is 7E45-2035

 Directory of C:\

16-12-2018 00:29 <DIR> 3D Objects

20-12-2018 22:45 401 skdav

 2 File(s) 802 BYTES

 15 DIR(s) 956,100,653,056 Bytes Free.

**8. NOTE: -** To change the drive.

 Syntax- <Drive name>:

**Example- C :\> D: **

** D :\> DIR **

 Volume in drive is RECOVERY

 Volume serial number is C2C1-3BF6

 Directory of D:\

 File not found

 D :\> C: 

C :\>

**9. DIR/P: -** It is used to display the directory listing in page wise manner.

 Syntax- DIR/P

**Example- C :\> DIR/P **

**10. DIR/W: -** It is used to display the directory listing in wider and columnar manner.

 Syntax- DIR/W

**Example- C :\> DIR/W**

 Volume in drive C is windows

 Volume serial number is 7E45-2035

 Directory of C:\

[.] [..] [3D Objects] [Skdav]

 2 file(s) 802 bytes

 15 dir(s) 956,100,653,056 bytes free

**11. DIR<file name>:-** It is used to display a specified file.

 Syntax- DIR <file name>

**Example- C:\> DIR skdav **

 Volume in drive C is windows

 Volume serial number is 7E45-2035

 Directory of c:\

20-12-2018 22.45 401 skdav

 1 file(s) 401 bytes

 0 dir(s) 955,587,928,064 bytes free.

**12. DIR/p/w: -** Display the list of file in page wise and wider manner.

 **Example- C :\> DIR/p/w **

**13. REN: -** It is used to remove a file.

 Syntax- REN <old file name> <new file name>

**Example- C :\> REN Document skdav** 

 C :\>

**14. COPY: -** It is used to make a duplicate copy of the source file. The target file name must be a new file name.

 Syntax- Copy <source File name> <Target file name>

**Example- C :\> Copy document Bio **

**15. TYPE: -** It is used to display the contains of a file. That is only in readable mode.

 Syntax- Type <file name>

**Example- C :\> Type skdav **

 **Output- file contain**

**16. DEL: -** It is used to remove a file from disk.

 Syntax- DEL <file name>

**Example- C :\> DEL Bio** 

 C :\>

**17. MD (Making directory) :-** It is used to create a new directory.

 Syntax- MD <directory name>

**Example- C :\> MD software **

**18. CD (Change directory):-** It is used to change the directory name. That means to activate or both inside into the directory.

 Syntax- CD <Directory name>

**Example- C :\> CD Software **

**19. RD (Remove directory):-** It is used to remove the directory.

 Syntax- RD <Directory name>

**Example- C :\> RD Software **

**Rules:**

1. While removing the directory always parent directory should be activated than we should remove the childe directory.
2. Before deleting the directory it must be empty.
3. The directory name or file name are not same.

**20. CD...:-** It back for 1 step.

**Syntax - cd ..**

**Example- C:\users\user> CD... **

**21. CD...\...: -** It back for 2 steps.

**Syntax – cd\**

**Example- C:\users\user> CD...\... **

**22. CD\:-** It activates to root directory.

**Syntax – cd\**

**Example- C:\users\user> CD\** 

 **Wild card**

 **Wild Card: -** It is used for substituting one character or set of character.

**1. \*(Astrict) -** It is used to substituting one or more than one character at a time.

**2. ? (Question Mark) -** It is used to substitute one character at a time.

|  |  |  |
| --- | --- | --- |
|  Wild card  |  What is represents |  EXAMPLE |
| \* . txt | All files with extension name as “txt”. | Letter.txtAbhi.txt |
| Report .\* | All files with primary name as “report” and any extension name. | Report.txtReport.doc |
| M\*. \* | All files starting with letter “M” and any extension name. | Memo.txtManual.doc |
| ???.\* | All files fall in between 3 letter and any extension name  | Win.txtRom.docDJ.bak |

**External Command**

**1. Format: -** This command is used for to create new tracks and sector into the external disk that means it prepare a new disk by creating new track and sector.

**2. Move: -** It is used for moving all the files from one directory to another directory.

 Syntax- MOVE <Source path and file name> <Target path>

**Example- C:\>Move C:\Newcollege\ITI\ETC\\*.\* C:\Newcollege\ugie\Chem **

**3. Tree: -** It is used to view the list of directory and subdirectory present and the disk on graphical from.

 Syntax- Tree

**Example- C :\> Tree **

 **Tree/f: -** It is used for display any specific subdirectory contains by showing the file name also.

 Syntax- Tree/f

**Example- C :\> Tree/f **

**Example- C :\> Tree/f C:\newclg **

**7. Edit: -** This command is used to modify or change the data of a file. That means it is the alternate commands of “copy con” command. The demerit of “copy con” command is the merit of edit command.

 Syntax- Edit

**Example- C :\> EDIT **

**Lab work-1**

* Create the below structure in MS DOS.

D:

 <EDU>

 <TECH> <NON TECH>

 DIP.TXT ARTS.TXT

 **Lab Work- 2**

* Create the below structure in MS DOS.

 D:

 <GAME>

 <ASIAN>

 <HOCKEY> <KABADI> <FOOTBALL>

 GOLD.txt SILVER.txt BRONZE.txt

 **Lab Work- 3**

* Create a below structure in MS DOS.

 D:

 <College>

 <SKDAV> <UGIE> <RIT>

 <IT> <ETC> <ELECT> <Civil> <Cerm> <E&Tc>

A1.Txt A2.Txt A3.Txt A4.Txt A5.Txt A6.Txt

**Lab Work- 4**

* Remove the directory of Lab work- 1.

**Lab Work- 5**

1. Change the directory to CIVIL

Copy A4.txt files from <CIVIL> to <CERM> by using path concept.

2. Back to the root directory

Move A5.txt from <CERM> to <CLG> by using path concept.

3. Create a file on your name by edit command inside <E&TC> directory.

4. Display the total structure of <CLG> directory by using tree/f command.

5. Copy all the files of <ETC> directory and place it inside <SKDAV> by using path concept.

6. Display the directory of <UGIE> by using path concept.

7. Create a new file on the name of A1.txt inside <ETC> by edit command.

8. Rename all the .txt to .Bak in at <ELECT> directory.

9. Remaining in <SKDAV> move the files to <ETC> directory to <UGIE> directory those first letter is A and 2nd letter don`t know and its extension may be anything.

10. Open your name file which is placed inside <ETC> directory.

a) Write some new data

b) Change the back ground color and text color

c) Copy some word, cut it and paste it in other place.

WINDOWS OPERATING SYSTEM

**WINDOWS OS :** Microsoft window is a device of operating system software. It is a graphical user interface operating system .It is most widely used in personal computer.

**WINDOWS :** A window is a area of desktop with in which all widows based program run.

**WINDOWS DESKTOP :** Desktop refers to main background area. We can customize desktop in various ways such as editing background pictures, changing background color and changing the icons on the desktop. There are small pictures which appear on the left side of the desktop called icon. We choose are of the icon by double clicking on it.

**Basic components of windows :**

1. **MY COMPUTER :** It provides a quick access to our computer disk device. Control panel and internal devices.
2. **MY DOCUMENT :** It provides a complete space to store our document.
3. **RECYCLEBIN :** It stores all the information of all the deleted files and folder. It also allows us to recover them.
4. **MY NETWORK PLACE :** It allows us to view or display various network available and files and folders on our network.
5. **START BUTTON :** It provides quick access to program and files.
6. **TASK BAR :** It appears normally at the button of the desktop. The desktop consists of start button on the left side of the task bar.
7. **CLOCK :** It displays the current time. It appears on the right side of the taskbar.
8. **Windows Accessories :** To improve our pc and productivity windows provides several accessories program that we can use.

**Steps-** a. Starts b. All programme c. Accessories

**1. Note pad :** It is used to create a simple txt document. The extension name is .TXT .

 **Start  All Programme  Accessories  Note pad**

 **2. Word pad :** It is a basic word processor. It is more advanced then note pad and less then Microsoft word. The extension name is DOC.

 **Start  All Programme  Accessories  Word pad**

**3. Paint :** It is a drawing tool. The extension name is bmp.

 **Start  All programme  Accessories  Paint**

**4. Calculator :** It is commonly used icon calculating tools in window OS.

 **Start  All Programme  Accessories  Calculator**

**5. Scan disk :** It is utility in MSDOSand MS Windows system which checks and repairs file systems and bad dusters on the hard drive.

 **Start  All Programme  Accessories  System tools  Scan disk**

**DRAG AND DROP :** In computer graphical user interface drag and drop is the action of clicking on an object and dragging it to a different location as required.

The basic sequence involved in drag and drop is ;

1. Press and hold down, the button on the mouse or the other pointing device to “grab” the object.
2. “Drag” the object/ cursor/ pointing device to the desired location.
3. “Drop” the object by releasing the button.

**FIND FILES AND FOLDERS** **:**

1. Click on start button. The start menu will appear.
2. Highlight search.
3. Click files or folders. The search results dialog box will open.
4. Choose on option.
5. Enter your search criteria. Use the table that follows to help you.
6. Click search. The results of your search will appear in the right pan.

**CHANGE WINDOW TASKBAR PROPERTIES :**

1. Right-click a blank area of the taskbar.
2. From the menu, select properties.
3. In the taskbar and start menu properties dialog.
4. Check group similar taskbar buttons.
5. Click ok.

**CREATE A SHORTCUT TO AN ITEM ON THE DESKTOP**

1. Click start. The start menu will appear.
2. Locate the item which you want to create a shortcut. If the item is located on a submenu, go to the submenu.
3. Click and drag the item on your desktop.

**KEYBOARD OPERATIONS :**

This table lists the commonly used shortcut keys:

 **TO PRESS**

Activate Help F1

Activate context- sensitive Help Shift –F1

Zoom in (limit 1600%) PgUP

Zoom out (limit 25%) PgDN

Switch windows forward F6

Switch window backward Shift-F6

Undo an operation CTRL-Z

Redo an operation CTRL-Y

Close Maxlm DL ALT-F4

Open a file CTRL-N

Save a file CTRL-S

Create a new file CTRL-N

Open camera control window CTRL-W

Open Observatory control window CTRL-T

**WINDOWS EXPLORER AND UTILITIES**

**WINDOWS EXPLORER :** It is a place we can view the drives on your computer and manipulate the folders and files using windows explorer. We can cut, copy, Paste, Rename and delete folders and files.

**To Open Windows Explorer :**

* 1. Click the start button, located in the lower left corner on our screen.
	2. Go to the programs.
	3. Go to Accessories.
	4. Click windows explorer.

Step to create file/folders **** Open windows explorer **** Right click in right side ****New****File/Folder

**How to cut/copy/paste/delete- File/Folder**

**CUT :**

1. Select what you want to cut.
2. Click Edit, which is located on the menu bar. A drop-down menu will appear.
3. Click Cut.

**PASTE :**

1. Place the cursor at the point where you want to place the information that is currently on the Clipboard.
2. Click Edit. A drop-down menu will appear.
3. Click Paste.

**COPY :**

1. Select what you want to copy.
2. Click Edit, which is located on the menu bar. A drop-down menu will appear.
3. Click copy.

**Using keyboard shortcuts :**

**Cut :**

1. Select what you want to cut.
2. Press Ctrl + X.

**Paste :**

1. Place the cursor at the point where you want to place the information that is currently on the Clipboard.
2. Press Ctrl + V.

**Copy :**

1. Select what you want to copy.
2. Press Ctrl + C.

**1. Expanding and collapsing explorer folders :** We will find a (+) and (-) sign on the left side of the list of folders.

By clicking on “+” sign we expanding the folder or click on “-“ sign we collapse the folders.

**Lab Work- 6**

 D:

 <Practice>

 <Science> <Arts> <Commerce>

A1.Bmp A2.TXT A3.DOC

1. Design the structure in windows explorer.
2. Copy A1.Bmp file from <Science> to <Arts>.
3. Rename A3.DOC file AA3Doc file.
4. Move A2.Txt file from <Arts> to <Practice>.
5. Delete A1.Bmp file from <Arts>.
6. Create a shortcut of AA3Doc file in desktop.
7. Change the icon symbol of AA3Doc file.
8. Restore A1.Bmp file from recyclebin.
9. Change the Screen Saver to 3D txt.
10. Change the date and time.

**CHAPTER – 5**

**MS - OFFICE**

**WORD PROCESSING**

The application programmed that enables the processing of word is called word processing. A word processing is a software package, that helps us to create edit to save to print document.

**Popular word processor are :**

1. Word
2. Word store
3. Microsoft word

**Microsoft word :** It is a word processing package MS Word is a software that allows to types design different style of letter grammatical spelling clicking mail merge etc.

**Starting MS Word :**

1. Click on start button.
2. Click on all programme.
3. Click on ms office.
4. Click on ms word.

**To create a new document :**

1. Click on file.
2. Click on new.
3. Click on new document.

**Opening a new document :**

1. Click on file.
2. Click on open.
3. Select the file you want to open.
4. Select on Open.

**To close a document :**

1. Click on file.
2. Click on file.

**Saving a document :**

1. Click on file.
2. Click on save.
3. Click on save as.
4. Click on enter name the file name.
5. Click on save.

**Text formatting**

**Style menu :** Allows you to define a group of paragraph and character formula as system.

**Font menu :** It allows you to change the font atent size 100 A/9 best for the text.

**Font size :** Use these buttons to show it unit a use.

**Alignment :** Text can be aligned to the text certain on right side of the page unit can be justified and distributed across the page.

**Number bullet :** It is used to highlight the selection of text by numbering it or presenting it by dots.

**Outside border :** This act as a border around the text.

**High light :** Use this option to change the document behind the text.

**Paragraph formatting :** This format of the paragraph can be changed to setting tables alignment changing the line space indicating etc.

**To apply paragraph formatting :**

* Select the paragraph you want to apply the format.
* from the format menu click on paragraph.
* From the paragraph dialogue box displayed to the appropriating change and click the OK button.

**To align text :**

1. Select the text you want to align.
2. In the general section alignment menu.

**Option Function**

* Align text It align the text with left margin.
* Centre It control the text between the left and

 right margin.

* Align right It align the text with right margin.
* Justify To spreads the text evenly between the left

 and right margin.

**To indent paragraph :**

1. Select the paragraph you wish to indent.
2. From the format menu click paragraph.
3. From the paragraph dialogue select indents and spacing tab.
4. Select the appropriate indentation.

 **Line spacing :**

1. Select the paragraph to be effected the spacing change.
2. Select the format menu then paragraph and check indent and spacing tab.
3. Click the spacing you can want in the line spacing drop-down list.

**To insert clipart :**

1. To click on insert.
2. Click on art icon.
3. Search the required clipart.
4. Click on the drown at the right.
5. Of the picture and select insert.

**Spelling and grammar :**

1. To check a word that was red underlined as miss pelled right click on the word.
2. To replace the word with one of the choice the original work.
3. Any possible correct spelling will be listed.
4. The word underlined because it is not in the dictionary right clicks on the word and the result will added for the menu.
5. It is a word phase is underlined with green there is a grammatical error.
6. Right click on the line and select the appropriate suggestion.

 **LAB WORK -7**

**1.** Type the given below data as per given format ?

**[Operating System]**

**Different OS name :**

* Dos
* Windows
* Unix
* Linux

**Disk operating system :** The operating system is used for operating files on a computer. It is set of computer programme and also known as DOS are to change list file is allow cut system resources, according to the requirement DOS provides pictures, assential to control hardware devices such as keyboard.

**2.** Add the line spacing 2.5 for the above paragraph ?

**3.** Type the header message as “operating system” and footer as page no. ?

**4.** Type different application software name in numbering format ?

**5.** Design the **eqn Z** $=$$\frac{x^{2}+y^{2}}{\sqrt{x^{3}+y^{3}}}$$A∩B\ne A∪B$**.**

**6.** Change the format of the paragraph as ;

FONT NAME - Anil

FONT SIZE - 10

Alignment – Justify

BOMLER AS OUT SIDE

**7.** Send your birthday invitation message to your 5 friends.

M.S EXCEL

MS excel generally called spreadsheet software. It is the large sheet where we can manipulate calculation, graph or chart plotting and data base management.

**Spreadsheet:**  A spreadsheet is defined as the large sheet containing a mixture of rows and column. It provides facility to organize the data in rows and columns. This spreadsheet is called as electronic spreadsheet software.

**Start To Excel:**

1. Click on start button
2. Click on excel icon.

**Worksheet:** It is the collection of rows and column where row and column are intersect each other then the cell is prepared.

 The column name starts with A, B. . . XFD

 The row no start from 1, 2, 3 . . . **. ,** 10, 48,576

 The home shell address is A1

 The end shell address is XFD 1048576.

 The maximum column is 16384.

 The maximum sheet can be inserted 255.

**Work Book:** The collection of worksheet is called work book. The workbook file extension name is .XLS.

Different data type in Excel?

* Text
* Number
* Date
* Time
* Formula

 **Graph or chart:** The pictorial representation of numerical value.

There are different type graph available in excel.

* Column
* Box
* Line
* Pie
* Area
* Scatter
* Stack
* Doughnut
* Bubble
* Rader

**Function**

***1) Sum ()*** - Adds all the numbers in a range of cells.

Syntax: sum (number1, number2 . . .)

Ex: = sum (10, 5, 30) output- 45

2) ***Max ()*** - Returns the largest value in a set of values, ignores logical values and text.

 Syntax: max (number1, number2 . . . . . .)

 Ex: =max (10, 20) output-20.

***3) Min ()*** - Returns the smallest number in a set of values, ignores logical values and text.

 Syntax: Min (number1, number2 . . . . . . .)

Ex: =min (40, 50) output-40.

 4) ***Average () -*** Returns the average (arithmetic mean) of its arguments, which can be numbers or names, arrays, or references that contain numbers.

 Syntax: AVERAGE (number1, number 2 . . . . .)

 Ex: = average (20, 40) output 50.

5) ***Fact ()*** - Returns the factorial of a number, equal to 1\*2\*3\*...\* number.

 Syntax: FACT (number)

 Ex: =fact (5) output -120.

6) ***Round ()*** - Rounds a number to a specified number of digits.

 Syntax: ROUND (number, num, digits)

 Ex: Round (123, 24, 2) output-123, 34.

7) ***Sign ()*** - Returns the sign of a number: 1 if the numbers is positive, zero if the number is zero, or -1 if the number is negative.

 Syntax: SIGN (number)

 Ex: sign (3) output-1

8) ***Mod ()*** - Returns the remainder after a number is divided by a divisor.

 Syntax: MOD (number-1, divisor)

 Ex: = mod (10, 5) output-0.

7) ***Power ()*** - Returns the result of a number raised to a power.

Syntax: POWER (number, power)

Ex: = power (2, 3) output-8

**TEXT**

***1) Char*** () - Returns the character specified by the code number from character set for your computer.

Syntax: CHAR (number)

Ex: = char (“66”) output-B

***2) Code*** ()-returns a numeric code for the first character in a text string, in the character set used by your computer.

Syntax: CODE (text)

Ex: = code (“a”)

***3) Concatenate*** () - Joins several text strings into one text string

Syntax: CONCATENATE (text-1, text-2- - - - -)

Ex: = concatenate (Abhishek, dev, abhijeet)

***4) Left () -*** Returns the specified number of characters from the start of a text string.

Syntax: LEFT (text [num- chars])

Ex: = left (‘’Rourkela”, 3) output-Rou.

***5) Right ()*** - Returns the specified number of character from the end of a text string.

Syntax: RIGHT (text [num- chars])

Ex: = Right (“Rourkela”5) output-rkela.

 6) ***Mid ()*** – Returns the characters from the middle of a text string, given a starting position and length.

 Syntax: MID (text, start- num, num- chars)

Ex: = mid (“Rourkela”2, 4) output-ourk.

***7) Len ()*** – Returns the number of character in a text string.

Syntax: LEN (text)

Ex: = Len (“Rourkela”) output-5.

8) ***Lower ()*** - converts all letters in a text string to lowercase.

Syntax: LOWER (text)

Ex: = lower (“Rkl”) output-rkl.

9) ***Upper ()*** - converts a text string to all uppercase letter.

Syntax: UPPER (text)

Ex: = upper (“rkl”) output-rkl

10) ***Replace ()*** - Replaces part of a text string with a different text string.

Syntax: REPLACES (old-txt, start-num, num-chars, new-text)

Ex: = Replace (“Rourkela”,1,3 “p”) output-Prkela.

11) ***Trim ()*** – Removes all spaces from a text string expect for single spaces between words.

Syntax: TRIM (text)

Ex: =trim (“Rkl”) output-Rkl

12) ***Value ()*** – converts a text string that represents a number to a number.

Syntax: VALUE (text)

Ex: =value (“33”) output-33

13) ***Proper ()*** - converts a text string to proper case; the first letter in each word in uppercase, and all other letter to lowercase.

Syntax: PROPER (text)

Ex: =proper (“rkl is a city”) output- rkl is a city

**LOGICAL**

1) ***AND ()*** - checks whether all arguments are TRUE, and returns TRUE if all arguments are TRUE.

Syntax: AND (logical-1, logical-2…….)

Ex: = and (a> 5, b. 40) output- false

2) ***OR ()*** - checks whether any of the arguments are TRUE, and returns TRUE or FALSE. Returns FALSE only if all arguments are FALSE.

Syntax: OR (logical-1, logical-2………)

Ex: = or (a, =15, b, =20) output- true

3) NOT () - changes FALSE to TRUE, or TRUE to FALSE.

Syntax: NOT (logical)

Ex: not (a, =70) output-true

4) ***If ()*** – checks whether a conditions is met, and returns one value if TRUE, and other value if FALSE.

Syntax: IF (logical - test, [value-if- true], [value -if - false])

Ex: = if (b2> 50, “pass”, “fail”).

**DATE AND TIME**

***1) Today ()*** - Returns the current date formatted as a date.

 Syntax: (today ()).

 Ex: = (today ()) output- 3/10/2018.

***2) Now ()*** - Returns the current date and time formatted as a date and time.

 Syntax: (now ()).

 Ex: = (now ()) output -3/10/2018 02:15.

***3) Year ()*** - Returns the year of a date, an integer in the range 1900-9999.

 Syntax: YEAR (serial- number)

 Ex: = year (today ()) output-2018.

4) ***Month ()*** - Returns the month, a number from 1(January) to 12 (December).

Syntax: MONTH (serial- number)

Ex: =month (today ()) output -3.

5) ***Day ()*** - Returns the day of the month, a number from 1 to 31.

 Syntax: DAY (serial-number)

 Ex: = day (today ()) output-2

6) ***Time ()*** - converts hours , minutes, and seconds given as numbers to an Excel serial number, formatted with a time format.

Syntax: TIME (hour, minute, second)

Ex: = time (30, 15, 00) output-3.30 pm.

**7) *Hour ()*** - Returns the hour as a number from 0 (12:00A.M) to 23(11:00P.M).

Syntax: HOUR (serial-number)

Ex: = hour (now ()) output-11

8) ***Minute ()*** - Returns the minute, a number from 0 to 59.

Syntax: MINUTE (serial-number)

Ex: = minute (now ()) output-3

9) ***Second ()*** - Returns the second, a number from 0 to 59.

Syntax: SECOND (serial-number)

Ex: =second (now ()) output-35

 Lab work- 8

1. Create a bar chart for the following party?

|  |  |  |  |
| --- | --- | --- | --- |
|  | BJP | CONGRESS | AAP |
| Delhi | 92 | 48 | 20 |
| U.P  | 85 | 69 | 66 |
| Bihar | 69 | 98 | 97 |

 Display the current date?

1. Add the no. like 250,5,10.
2. Find the factional of 5?
3. Find the power (8, 2) ?
4. Convert a text string to upper case i.e. “SK DAV”.
5. Convert a text string to proper case ‘RKL is a smart city ‘.
6. Find the remainder of 2 nos i.e. (15, 4).
7. Find the round up place of 136.957 up to 2nd place of decimal places?
8. Concatenate 3 city make like Punjab, Mumbai, Delhi.
9. Design a data base to store 3 students name their 1st internal mark & 2nd internal mark. Find total mark & remark?

 If mark is > = 50 then “pass” otherwise “fail”?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RNO | NAME | 1st Internal | 2ND Internal | TOTAL | % mk | REMARKS |
| 1 | Abhishek | 70 | 80 |  ? |  ? |  ? |
| 2 | Santos | 65 | 60 |  ? |  ? |  ? |
| 3 | Dwiti | 60 | 65 |  ? |  ? |  ? |

MS POWER POINT

POWER POINT :- Power point is a slide show presentation program that’s part of the Microsoft office suite of tools. Power point makes it easy to create. Collaborate and present your ideas in dynamic, visually, compelling ways.

 Power point is a complete presentation graphic package. It gives everything that we need to produce a professional looking presentation. Drawing, graphing and presentation management tools all designed to be easy to use and team.

STARTING POWER POINT :-

Start All program me Ms Office Ms power point.

CREATING A PRESENTATION:-

When we start power point we can work on it is many different ways such as:-

1. AUTO CONTENT WIZARD: - If you want power point to help you with the content of each slides of your task.
2. PICK A LOOK WIZARD: - If you know what you want to say on each slide but want help with the look of individuals slide.
3. TEMPLETE: - If you want to make a slide look like a template.

(d) Blank presentation – If you want to start with a blank slide.

(e) Open an existing presentation – If you want modify an existing presentation or use it is a template for a new presentation.

Create a new slide

* Click on new
* Choose blank presentation on the task panel
* Here it display two panels for title and sub-title

Insert a new slide

* Click in home panel
* Click in new slide
* It display different type office theme
* Select anyone

Apply a design Templates

* Click to design panel
* Select different design of pre-defined templates
* Select any one for applying into the slide

Applying animation to objects

* Click on animation tab
* It display different styles of slide transition
* Select anyone for applying into the slide

 Applying custom Animation to the object.

* Click in Animation
* Click in custom Animation
* Click in add effects
* Select any types of option like Entrance, Emphasis, Exit motion paths.

Run the slide show

* Press F5 to run the slide show

Or

* Click in view
* Click in slide show

Saving, opening and closing presentation

Saving

* Click in the file name
* Click in save
* Write the presentation file name
* Click in save

Opening

* Click in file
* Click in open
* Select the presentation file
* Click in open

 Closing / Exiting

* Click in file
* Click in close

**CHAPTER - 6**

**INTERNET**

**COMPUTER NETWORK :**

A computer network is a group of computers that are connected to each other for the purpose of communication. A computer network allows computer to communicate with many other computers and to share resources and information. The Advanced Research Projects Agency (ARPL) funded the design of the “Advanced Research Projects Agency Network” (ARPANET) for the United States Department of Defense It was the first operational computer network in the world. Development of the network began in 1969, based on designs developed during the 1960s.

**INTERNET :**

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suit (TCP/IP) to serve billions of users Worldwide. It is a network of networks that consists of millions of private and public, academic, business, and government network of local to global scope that are linked by a broad array of electronic and optical networking technologies.

**APPLICATION OF INTERNET :**

* Communication with other computer around the world.
* Banking
* Investment
* Shop for good and service
* Download and listen the music
* Watch movies
* Take a course
* Access education materials
* Accessories of entertainment and leisure like as online games, magazines and vacations planning guides, share and edit documents with other in real time provide into graphic auto clips and video clips.

**ADVANTAGES OF INTERNET :**

* E-Mail (Electronic Mail)
* Information
* Entertainment
* Programmes
* Discussion groups
* Online chat.

**INTERNET SERVER :**

A server is any combination of hardware or software designed to provide services to clients. When used alone, the term typically refers to a computer which may be running a server operating system, but is commonly used to refer to any software or dedicated hardware capable of providing services.

 **WEB BROWSER :**

A web browser is a software application for retrieving. Presenting, and traversing information resources on the world wide page. An Information resources is identified by a uniform resources identifier(URI) and may be a web page, image, video or other piece of content. The major web browser are internet explorer, Mozilla Firefox, Apple safari, Google chrome, Netscape navigator 9, and opera for window and Apple safari, Mozilla Firefox, Netscape’s navigator 9, opera for Macintosh.

**WEB PAGE :**

A webpage or web page is a document or resource of information that is suitable for the World Wide Web and can be accessed through a web browser and displayed on a computer screen. This information is usually in HTML or XHTML format and may provided navigation to other WebPages via hypertext links.

 **WEBSITE :**

 A website (also spelled web site) is a collection of related web pages, images, videos or other digital assets that are addressed with a common domain name or IP address in an Protocol-based network. A web site s hosted on at least on web server, accessible via a network such as the Internet or private local area network.

**UNIFORM RESOURCE LOCATOR (URL) :**

A uniform resource locator (URL) is a subset of the uniform resource identifier (URI) that specifies where an identified resource is available and the mechanism for retrieved it.

**WEB SEARCH ENGINE :**

A web search engine is a tool designed to search for information on the World Wide Web. The search result is usually presented in a list of results and is commonly called hits. The information may be consisting of web page, image, information, and other types of files.

**HYPERTEXT TRANSFER PROTOCOLO (HTTP) :**

 Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. Its use for retrieving inter-linked resources, called hypertext documents.

**WORLD WIDE WEB (WWW) :**

The World Wide Web, abbreviated as WWW and W3 and commonly known as The Web, is a system of interlinked hypertext document contained on the Internet. With a web browser, one can view web pages that may contain text, images, video, and other multimedia and navigate between them using hyperlinks.

**E-MAIL :**

 Electronic mail is a method of exchanging message between people using electronic devices. E-mail appropriate across computer network, which today is primarily in the internet.

**ADVANTAGES OF E-MAIL :**

* Speed
* Cost
* Conveniences

**CREATE AN E-MAIL ACCOUNT :**

* Double click on internet explorer.
* Write [www.yahoo.com](http://www.yahoo.com) or gmail.com in the address box then press enter.
* Click on auto on account on account.
* Then it will display a form.
* Filling the given form.
* Click on a agree all form and condition.
* Your account will be created.

**SENDING E-MAIL :**

* Click on create E-mail to send a new message.
* Type the E-mail address at the person when you want to send on copy of message to a person who not directly invited.
* Click on this area of subject and then type the subject on the message.
* Click in message box and the type message.
* Click on the sound button to sent the message.

**CHATTING :**

 Chat may refer find of communication over the internet that efforts a real time transmission of text message from enter to receiver.

**CHAPTER – 7**

**“C” Programming**

**Q1. W.A.P to print the message as “WELCOME TO SKDAV”.**

#include<stdio.h>

#include<conio.h>

void main()

{

 printf (“WELCOME TO SKDAV“);

}

**Output =**

WELCOME TO SKDAV

**Q2. W.A.P to accept sum of 2 numbers.**

# include<stdio.h>

# include<conio.h>

void main()

{

int a,b,sum;

 clrscr();

 printf(“enter two nos“);

 scanf(“%d%d”,&a,&b);

 sum=a+b;

 printf(“The sum of the two number is %d”,sum);

}

**Output =**

 Enter two numbers 23 24

 Sum of numbers is 47

**Q3. W.A.P in C to find the greatest number among three numbers**

#include<stdio.h>

#include<conio.h>

void main()

{

 int a,b,c;

 clrscr();

 printf(“enter3nos“);

 scanf(“%d%d%d”,&a,&b,&c);

 if(a>=b&&a>=c)

 {

 printf(“largestis%d”,a);

 }

 else

 if(b>=a && b>=c)

 {

 printf(“largest is %d”,b);

 }

 else

 if(c>=a && c>=b)

 {

 printf(“largest is %d”,c);

 }

}

**Output =**

Enter 3 nos 34 90 70

Largest is 90

**Q4. W.A.P in C to find the average of n numbers by using for loop.**

#include<stdio.h>

#include<conio.h>

void main()

{

 int i,n,num;

 float sum,avg;

 clrscr();

 printf(“enter the nth value : ”);

 scanf (“%d”, &n);

 for (i=1; i<=n; i++)

 {

 printf(“enter a number : ”);

 scanf(“%d”, &num);

 sum = sum + num;

 }

 avg = sum/n;

 printf(“average of %d different number is %d : ”, n, avg);

}

**Output =**

enter the nth value : 3

enter a number : 25 36 78

average of 3 different number is 46.33

**Q5. W.A.P in C to determine whether a number is prime or not ?**

#include <stdio.h>

void main()

{

 int n, i, flag = 0;

printf("Enter a positive integer: ");

 scanf("%d", &n);

 for (i = 2; i < n / 2; ++i)

 {

 if (n % i == 0)

 {

 flag = 1;

 break;

 }

 }

 if (n == 1)

 {

 printf("1 is neither prime nor composite.");

 }

 else if (flag == 0)

 {

 printf("%d is a prime number.", n);

 }

 else

 {

 printf("%d is not a prime number.", n);

}

}

**Output=**

Enter a positive integer: 7

7 is a prime number.

**Q6. W.A.P in C to check whether a given number is palindrome or not ?**

#include <stdio.h>

void  main()
{
  int n, rev = 0, rem,temp;

  printf("Enter a number“);
  scanf("%d", &n);

  temp = n;

  while (temp != 0)
  {
 rem = temp % 10;
 rev = rev  \* 10 + rem;
 temp = temp/10;
  }

  if (rev == n)
 printf("%d is a palindrome number.\n", n);
  else
    printf("%d isn't a palindrome number.\n", n);

 }

Output =

Enter a number 131

131 is a palindrome

**Q7. W.A.P in C to accept row wise and column wise element in a two dimensional array and print them.**

#include<stdio.h>

#include<conio.h>

void main()

{

 int i,j,mark[3][3];

 clrscr();

 printf("enter 9 elements ");

 for(i=0;i<3;i++)

 {

 for (j=0; j<3; j++)

 {

 scanf("%d",&mark[i][j]);

 }

 }

 printf("\n the matrix elements are \n");

 for(i=0;i<3;i++)

 {

 for (j=0; j<3; j++)

 {

 printf("%d \t",mark[i][j]);

 }

 printf("\n");

 }

}

OUTPUT =

Enter 9 elements

11 22 33

44 55 66

77 88 99

 the matrix elements are

11 22 33

44 55 66

77 88 99

**Q8. W.A.P in C to find the vowels in a given string.**

#include <stdio.h>

int main()
{
  int i, count = 0;
  char s[50];

  printf("Input a string\n");
  gets(s);

for (i=0; s[i]!=`\0’; i++)

 {
    if (s[i] == 'a' || s[i] == 'A' || s[i] == 'e' || s[i] == 'E' || s[i] == 'i' || s[i] == 'I' || s[i] =='o' || s[i]=='O' || s[i] == 'u' || s[i] == 'U')

{
   count++;
 } }

  printf("Number of vowels in the string: %d", count);

  return 0;
}

**OUTPUT =**

Input a string Rourkela

Number of vowels in the string : 4

**Q9. W.A.P in C to find the factorial of a number by using recursion.**

int fact(int n);

#include<stdio.h>

#include<conio.h>

void main()

{

    int num,f;

    clrscr();

    printf("\n  Enter the number: ");

    scanf("%d",&num);

    f=fact(num);

    printf("\n  The factorial of the number %d is %d",num,f);

    getch();

}

int fact(int n)

{

    if(n==0 || n==1)

        return 1;

    else

        return(n \* fact(n-1));

}

**OUTPUT =**

Enter a number 3

The factorial of the number 3 is 6

**Q10. W.A.P in C to find the sum of Fibonacci series, by using function.**

#include <stdio.h>

void Fibo(int r);

void main()

{

 Int range;

 printf(“ enter the range of Fibonacci series :”);

 scanf(“%d”, &range);

 fibo(range);

}

void fibo(int r)

{

 Int a=0, b=1, c, sum=0;

while( a <= r)

{

 sum +=a;

 c = a+b;

 a = b;

 b = c;

}

 Printf(“sum of fibo series is %d”,sum);

}

**OUTPUT =**

**Q 11. W.A.P in C to accept a number from keyboard and print it in reverse order of entry, by using function.**

#include <stdio.h>

void reverse(int no);

void  main()
{
  int n ;

  printf("Enter a number“);
  scanf("%d", &n);

  reverse (n);

}

void reverse(int no)

{

 int  rev = 0, rem,temp;

 temp = no;

  while (temp != 0)
  {
  rem = temp % 10;
  rev = rev  \* 10 + rem;
 temp = temp/10;
  }

 printf("reverse of the no is %d \n", rev);

}

Output =

Enter a number 131

Reverse of the no is 131

**Q12. W.A.P in C to compute the sine series.**

#include <stdio.h>

int main()

 {

 int i, j, n, fact, sign = - 1;

float x, p, sum = 0;

printf("Enter the value of x : ");

scanf("%f", &x);

printf("Enter the value of n : ");

scanf("%d", &n);

for (i = 1; i <= n; i += 2)

 {

 p = 1;

 fact = 1;

 for (j = 1; j <= i; j++)

 {

 p = p \* x; fact = fact \* j;

 }

 sign = - 1 \* sign;

sum += sign \* p / fact;

}

printf("sin %0.2f = %f", x, sum);

return 0;

}

Output =

Enter the value of x : 2

Enter the value of n : 3

Sin 2.00 = 0.666667