

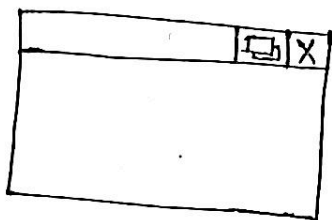
04-09-19
Wednesday

UNIT - 1

Creating, saving, compiling, running a 'C' program in windows environment:

Creating:

Start → My computer → C drive → program files → TC
(turbo C) → TC.exe

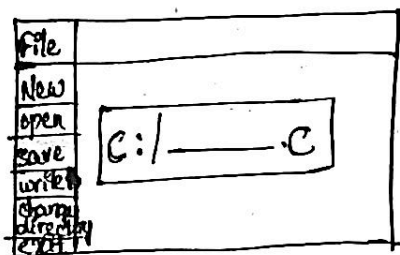


Program:

```
/* write a 'C' program to print Shashithi */  
#include <stdio.h>  
#include <conio.h>  
void main ( )  
{  
    clrscr ( );  
    printf ("Shashithi");  
    getch ( );  
}
```

Saving:

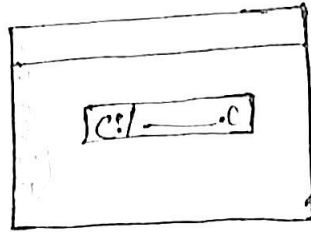
1, Alt + F



We must save every 'C' file with '.c' extension.

Ex: filename.c
sample.c

2. Press 'F2' function key.



Compiling:

For compiling C program in windows operating system we use

Alt + F9.

Running:

For running a program in windows environment we use ctrl + F9 command.

05-09-19
Thursday



Creating, Saving, Compiling, Running a 'C' program in LINUX or UNIX environment:

Creating: In LINUX or UNIX operating system we use vi editor for creating a 'C' program.

\$vi filename.c

Ex: \$vi sample.c.

vi editor: vi stands for visual editor. Another name for vi editor is on screen editor. vi editor works in 2 modes (1) command mode (2) insert mode. By default vi editor opens in command mode.

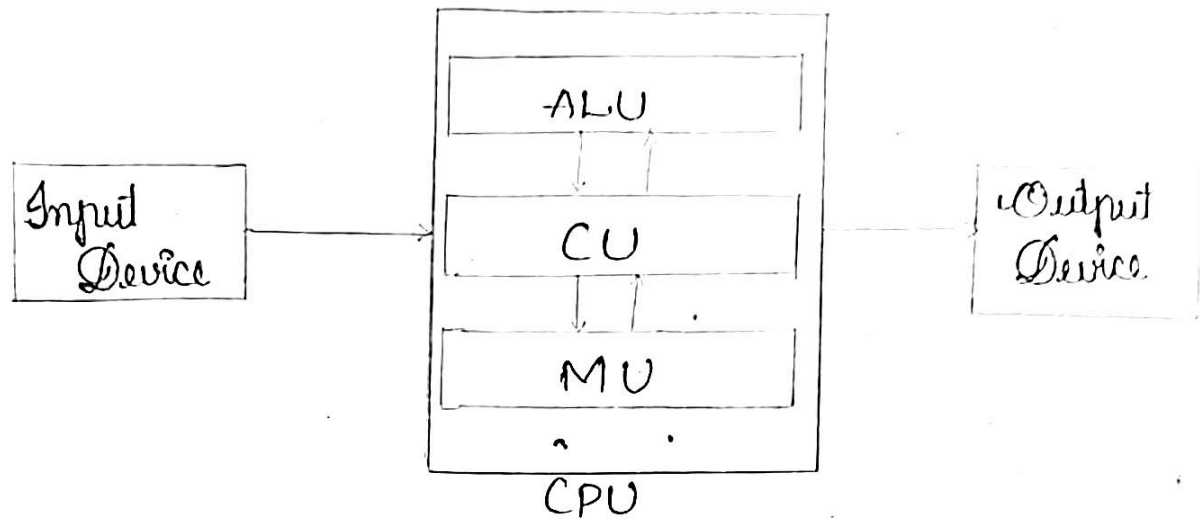
Saving: In vi editor we use :wq command for saving the file.

Compiling: \$cc

\$./a.out → execute

06-07-19
Friday

Block diagram of computer:



Input devices: An input device is any device that provides input to a computer.

Ex: Keyboard, Mouse, Scanner, Microphone, Lightpen, PC video camera, Touch pads, Touch screens.

Output devices: Devices that are used to receive the output of processed data by the computer in the form of display, print, video, audio that are user can understand and use it. This unit obtains processed data from a computer and it provides a machine to man communication.

Ex: Monitor, Printer, Speaker, fax...

CPU (Central Processing unit): The CPU is responsible for executing instructions such as arithmetic calculation among data and movements of data inside the computer. The CPU is called as brain of the computer. Sometimes it called as central processor or micro processor.

CPU is responsible for accepting input, storing instructions, set of processing data and again store output, the main components of CPU are Arithmetic & Logical unit, Control unit and Memory unit.

ALU: It performs arithmetic logical operations & data such as addition, subtraction, multiplication, division. Comparison and, or, not...

CU: Controlling of all operations like input, processing and output are performed control unit. It takes care of step by step processing of all operations inside the computer.

MU: It is used for storing data and instructions before and after processing. This unit supplies the information to other units of computer when needed.

Types of Memory: Computer memory is divided into 2 types (1) primary memory (storage) or main memory, (2) secondary memory (storage) or auxiliary memory.

Primary memory: It is a fast memory, it stores data and programmes that all to be executed. It delivers the stored information to the CPU with minimum delay. The main memory is directly accessible to CPU. It is of two types (1) Ram, (2) Rom.

Ram: Ram means Random Access Memory. Data and instructions are stored temporarily in RAM. RAM allows reading and writing into its memory. Hence, it is called as read write memory. RAMs are volatile memory in the sense that when the electric power is switched off RAM loses all its stored data. Ram is divided into 2 types (1) static RAM, (2) dynamic RAM.

The word static indicates that the memory retains it contents as long as power is being supplied. It however data is lost when the power gets down give to volatile nature.

Dynamic RAM: D-RAM unlike S-RAM must be continuously refresh in order to maintain the data. This is done by placing the memory on a refresh circuit that rewrites the data several 100 times per second.

07-09-19
Saturday

ROM: ROM stands for Read Only Memory. It can only read and can not be modified. The data is placed in the ROM at the time of its manufacturing. ROM are non volatile in the sense, when, an electronic power is switched off, ROM does not loses its stored data. ROM is divided into different types

- 1) M ROM - Maskable Read Only Memory.
- 2) P ROM - Programmable Read Only Memory.
- 3) EPROM - Erasable, Programmable Read Only Memory.
- 4) EEPROM - Electrically Erasable Programmable Read Only Memory.

2. Auxiliary storage devices (or) Secondary Storage:

Secondary storage devices are classified into 2 types.

1. Magnetic Storage and Optical Storage. Magnetic storage devices are hard disc, floppy disc. Optical storage devices are CDs, DVDs, pen drives and so on.

Hard disk: These are convenient when large volumes of data ^{are} to be stored. They are expensive and can not be removed easily from the system. Data can be written to and read from a hard disk 20 times faster than a floppy disk. The storage capacity of hard disk is 1GB to 2TB and more. Hard disks are rewritable.

Floppy disk: A floppy disk is a magnetic storage medium for a computer systems. The floppy disc is

composed of a thin, flexible magnetic disk shield in a square plastic carrier. In order to read and write data from a floppy disk a computer system must have a floppy disk drive.

CD (Compact disk): CD is a portable disk having data storage capacity between 650MB-700MB. It can hold large amount of information such as music, full motion videos, text... CDs can be either read only or read, write type.

The storage capacity of CD

CD-ROM	
CD-R	700MB
CD-RW	

DVD (digital video or versatile disk): DVD is similar to a CD, but has longer storage capacity and enormous clarity. Depending upon the disk type it can store several gigabytes of data. DVDs are used to store music, movies and can be played back on televisions or the computer, these are not rewritable the storage capacity of DVD is 4.7 GB.

Pendrive: A small pen size flash memory device indicated with USB (universal serial bus). Interface offering easy fast and reliable way for storing and transferring digital files.

Memory card: An electronic flash memory device offering an easy storing fast and reliable way for storing and transferring digital data. Non-volatile storage that is (i.e) data is not lost even when the card is removed from the device and can be reformatted and reused. Now widely used in electronic devices like mobile phones, digital cameras, hand held devices, laptops, MP3 players...