1.1 Introduction

Earlier in 1960's, operating system is software which handles the hardware. Presently, we see operating system as set of programs that create the hardware to work. Generally, operating system is set of programs to facilitate controls of a computer. There are different types of operating systems as UNIX, MS-DOS, MS-Windows, Windows/NT, and VM.

Over protecting of computer engage software at numerous levels. We will distinguish kernel services, library services, as well as application-level services, all of which are division of an operating system. Processes run Applications, which are related together by means of libraries that carry out standard services. The kernel supports the development by providing a path to the peripheral devices. The kernel reacts to service calls as of the processes as well as interrupts from the devices. The centre of the operating system is the kernel, a organize program with the purpose to function in restricted state, act in response to interrupts from external devices as well as service requests along with traps from processes. In order to run Computer hardware, we require an Operating System that will be able to recognise all hardware components and enable us to work on it. In this unit, we will study about Operating system and its evolution along with its necessary role.

1.2 Definition And Function Of Operating Systems

An operating system also known as OS is a software program that enables the computer hardware to communicate and operate with the computer software. Operating systems perform basic tasks:

- Recognizing input from the keyboard

- Sending output to Monitor

- keeping track of files and directories

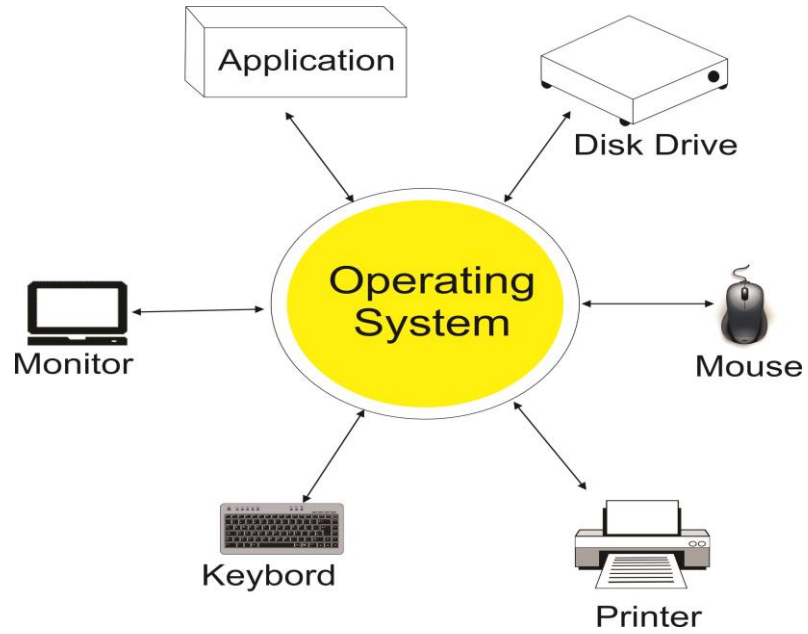- Controlling peripheral such as disk drives and printers.

Fig 1.1 Operating System with Computer hardware

The operating system is system software that is stored on the storage device such as hard disk, CD-ROM or floppy disk. When a computer is switched on, the operating system is transferred from the storage device into main memory through ROM.
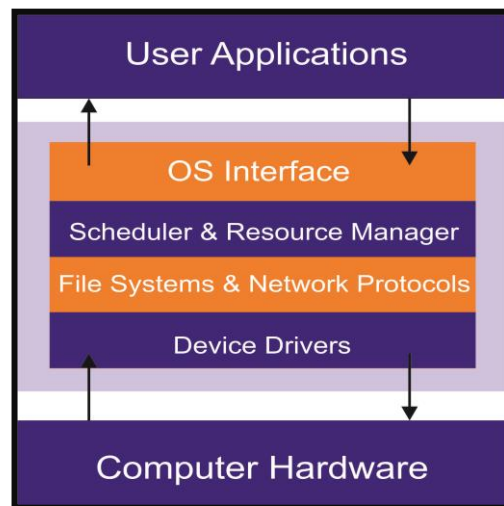

Fig 1.2 Position of Operating System

An operating system controls and coordinates the operations of the computer system. It manages the computer hardware, controls the execution of application programs and provides the set of services to the users. It acts as an interface between user and the computer. The users interact with the operating system indirectly through application program.

The work of the operating system involves:-

- Managing the processor

- Managing Random Access Memory

- Managing Input/output

- Managing execution of applications

- Managing Files

- Controlling Information management

Parts of Operating System

i) Resident part-

It is called as kernel that contains critical functions. It is loaded inside the main memory during the booting. It performs various functions residing in the main memory.

ii) Non-resident part-

This part of operating system is loaded into main memory when required. It includes:

- Disk Operating System (DOS) developed by Microsoft.

- Operating System 2 (QS/2) developed by IBM.

- XENIX or ZENIX developed by Microsoft.

- WTNOWS developed by Microsoft

- WINDOWS- NE

Check your progress 1

1. It is studied that an Operating System is a _____.

   a. System software

   b. Stores information on the storage device

   c. Controls and coordinates the operations of the computer system

   d. All of above