

OPERATING SYSTEM

NOTES - 2

Q:- Define Operating System

Ans:- An operating system may thus be defined as a set of system programs that control and co-ordinate the operation of a computer system. An OS permits the continuous operation of a computer from program to program with the minimum amount of operator intervention, it acts as an interface between the operator, the computer and the processing program.

The American National Standard Institute (ANSI) defⁿ of an operating system is software which controls the execution of computer programs and which may provide scheduling, debugging, input/output control, ~~also~~ accounting, compilation, storage assignment, data management and related services. OS are available on magnetic-tape, disk or any other media used by the user system.

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Q. What are major facilities provided by a modern operating system?

or

What are the main tasks of an Operating System?

Ans: * Easy interaction between humans and computers

- * To set a link between hardware and software
- * Memory management of the system.
- * Loading and scheduling users' programs along with necessary compilers.
- * Controlling input and output
- * Controlling program execution
- * Scheduling processes.
- * Managing use of main memory
- * File management system control
- * To set the job priority queue
- * To ~~for~~ provide data security and integrity control.
- * Accounting resource usage.

THE UNIX OPERATING SYSTEM

Q:- What is Unix Operating System?
Write down its main features. &
Write down why UNIX is so popular?

Ans; UNIX is a multiuser, time sharing operating system which was written in 1973 by Ritchie and Thomson at the Bell Telephone Laboratories, USA.

Features!

- * UNIX is written in C, a high level language and is thus portable to a variety of computers.
- * The interface provided to users is simple but yet powerful.
- * The file system used by UNIX is hierarchical which allows efficient implementation and easy maintenance.
- * UNIX considers all files to be a continuous sequence of characters, known as a byte stream.
- * UNIX provides a simple, consistent interface to peripheral devices.

Contd..

- * UNIX is a multi-user, time-shared, multiprogrammed operating system. Individual users can, execute several process simultaneously. It can be also be time shared by several users and this is a multitasking system.
- * UNIX supports a scripting language called shell which allows complex jobs to be performed using built-in programs by UNIX.
- * UNIX can be run on a variety of architectures.
- * UNIX can support any programming language that has a compiler or an interpreter provided it has an interface that maps user requests for operating system services to the standard set of request used by UNIX.