What is an operating system, discuss its main functions and responsibility (at least 4).

Ans.

Operating system is a software which manages hardware and user installed software’s.

1. Security

OS provides security for the user data. It helps in protection of data from viruses and intrusions.

1. Memory Management

OS assigns memory to the required processes.

It also decides how much memory to assign to certain processes.

It keeps track of the memory assigned to all the running processes.

1. File Management

OS keeps track of the files present in the file system.

It keeps check of the usage, location and other related information of the files.

1. Device Management

It keeps track of the devices connected.

It decides which process should get the device when needed.

It also keeps track of the errors that occur if a certain process is stopped abruptly.