**Operating System**

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perating system is an system which enables the user to interact with the computer. It also tells the computer how to use devices such as key board, monitor, printer. We can also say that OS is an interface between user and computer hardware. Every computer has an OS system software, which takes care of the effective and efficient utilization of all the hardware and software components of the computer.

**Function of the Operating system**

1. **Memory management**
2. **File management**
3. **I/O control**
4. **Security**
5. **User interface**
6. **Virtual memory**
7. **Process management**
8. **Memory Management:**  As a memory manager the operating system takes care of the allocation and deallocation of memory space to the various program.
9. **File management:** As a file manager, the OS takes care of file related activities such as storing retrieving, sharing, protection of file etc.
10. **I/O control:** The task of managing various input output devices like keyboard, mouse, monitor etc. is done by OS.
11. **Security:** As a security manager the operating system protects the resources and information of a computer system from destruction and unauthorized access.
12. **User interface:** The operating system provides the interface between the user and hardware. The user interface consists of a set of command through which a user communication a program.
13. **Virtual memory:** Virtual memory means making a computer appears to have more memory than it actual has. It has also one of the important functions of operating system.
14. **Process management:** As a processing manager the operating system take care of creating and deletation of processing schedule of various system resources.
15. **Device management:** An Operating System manages device communication via their respective drivers. It tracks all devices and decides which process gets the devices for how much time.
16. **Error detecting aids:** Production of dumps, traces, error messages, and other debugging and error detecting aids is done through operating system.
17. **Coordination between other software’s and users:** Coordination and assignment of compilers, interpreters, assemblers and other software to the various users of the computer systems.