Introduction to Operating Systems

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An operating system is like a toy-shop manager.

- It directs operational resources. (like control use of CPU memory, peripheral devices like disks, etc.)
- Enforces working policies.(e.g. fair access to shared resources, it can also be used to limit to allocate maximum amount of certain resource that a particular application or process can use.)
- Mitigate difficulty of complex tasks.

What is an Operating System?

- directly has access to priviledged resources.
- hides hardware complexity
- manages hardware on behalf of one or more applications according to some predefined policies.
- In addition, it ensures that applications are isolated and protected from each other.
- * System Calls provide an interface to services made available by an operating system. These calls are generally available as routines written in C/C++, although certain low-level tasks where hardware is must be directly accessed, may have to be written in assembly language.