

Advanced Operating System

- ① Operating Systems : Objectives and Functions
- ② File concepts and file attributes
- ③ File operations
- ④ Access Methods ↗ Sequential access
↘ Direct access
- ⑤ Directory Structure
- ⑥ Directory Structure levels.

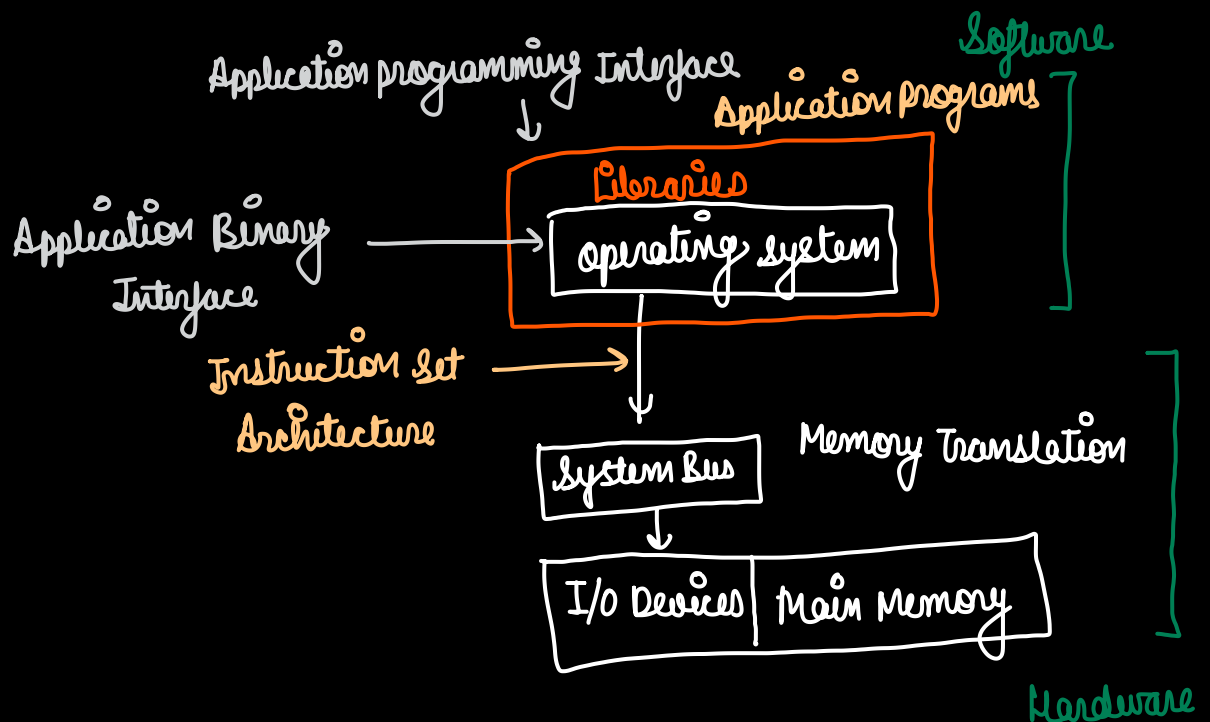
Operating System

→ serves as a bridge between applications and computer hardware

→ 3 primary objectives

- convenience
- efficiency
- ability to evolve

Structure of a computer



OS services

- ① program development
- ② program execution
- ③ Access to I/O devices
- ④ controlled access to files
- ⑤ system access
- ⑥ error detection and response
- ⑦ accounting
- ⑧ resource mang.
- ⑨ process mang.

Interfaces in a computer system

- ① Instruction set Architecture (ISA)
- ② Application Binary Interface (ABI)
- ③ Application programming Interface (API)

File concept, file Attributes

file: logical storage unit defined by OS

Attributes

- ① Name
- ② Identifier
- ③ type
- ④ location
- ⑤ size
- ⑥ protection
- ⑦ time, date & user id

File operations

- ① create
- ② write
- ③ read
- ④ reposition
- ⑤ delete
- ⑥ truncate → erase contents but maintain attributes

more operations on file

- ① Append
- ② Rename
- ③ copy
- ④ save
- ⑤ send
- ⑥ edit

