-1TypesOfOs

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Single process   ms dos

Batch processing
1. Firstly, user prepares his job using punch cards. 2. Then, he submits the job to the computer operator. 3. Operator collects the jobs from different users and sort the jobs into batches with similar needs. 4. Then, operator submits the batches to the processor one by one. 5. All the jobs of one batch are executed together

Disadvantages Priorities cannot be set, if a job comes with some higher priority. - May lead to starvation. (A batch may take more time to complete)

Multiprogramming
1. increases CPU utilization by keeping multiple jobs (code and data) in thememory so that the CPU alwayshas one toexecute in case some job gets busy with
I/O. 2. single cpu 3. context switching happpens

Multitasking
1. Able to run more than one task simultaneously

Multi-processing (windows)

1. more than 1 CPU in a single computer
2. Increases reliability, 1 CPU fails, other can work

Distributed
OS manages many bunches of resources, >=1 CPUs, >=1 memory, >=1 GPUs, etc

Loosely connected independent, interconnected computer nodes.

networked, communicating, and physically separate

Real time
(atcs (air traffic control system), robots, nuclear power plant)

Real time error free, computations within tight-time boundaries.