Multiprogramming:
More than one program running concurrently in a single computer

Notes:

Multiprocessing:
A computer that has two or more processors with common access to a main storage

Notes:

Shared Single Bus:
    Pros: **Cons:**

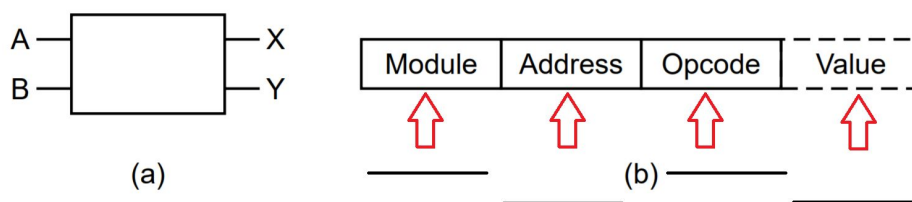### Crossbar Switches:
    Pros: **Cons:**

Multistage Switching:
    Pros: **Cons:**

Figure 8-3. (a) A 2×2 switch. (b) A message format.

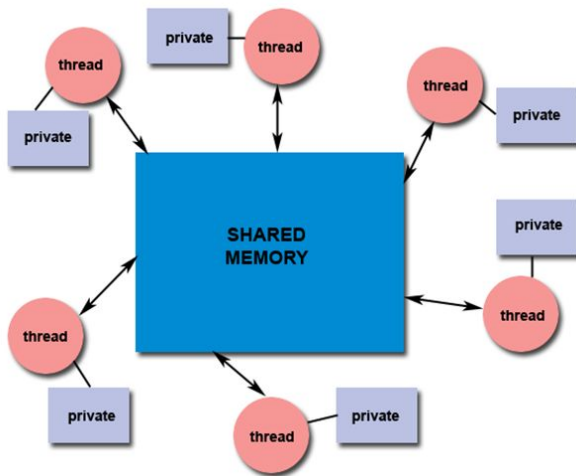| Number of stages:		Number of switches per stage:		Total number of switches:
$\log_2(n)$	X	$n/2$	=	

6:

10:

Multitasking:

Multitasking is the concurrent performance or interleaved execution of two or more computer tasks; same as multiprogramming, using different terminology.

Notes:

Multithreading:

Multithreading is the use of multiple threads (in parallel) on shared memory multiprocessor architectures. As threads are lightweight, they can be viewed as "children" of processes as they use process resources after they have been unleashed in execution.

Notes: