

* Paging (Non-Contiguous Memory Allocation)

- In paging main memory is divided into equal size frames.
- Also each process is divided into small chunks known as pages.
- The chunks of a process are known as pages & chunks of memory are known as frames.
- Always remember, size of page is equal to size of frame.
- A frame holds one page of data.

- But we need to know which frame is holding which page & for this reason page table is needed.
- Page table accepts page no. as i/p & generates frame no. as output.
- Each process will have separate page table.

Page No.	Frame No.
⋮	⋮
⋮	⋮
⋮	⋮

Page Table.

Page Nos.

Page

Frame Nos.

Frame

0	Page 0	1KB	Frame No 0			1KB
1	Page 1	1KB	1		Page 0	1KB
2	Page 2	1KB	2			1KB
3	Page 3	1KB	3		Page 2	1KB
			4		Page 1	1KB
			5			1KB
			6			1KB
			7		Page 3	1KB
			8			1KB

Process
Logical Memory/
Secondary
memory

Page
Table

Main Memory/
Physical
Memory

Process/Program = 4KB

CPU wants to execute Program,
load it from secondary memory
to main memory.

Paging Hardware / Address Translation in Paging

