

Swapping

Paged Virtual Memory

- ➔ The OS can use disk to simulate larger virtual than physical memory
the pages can be moved between memory and disk (a.k.a paging in/out)

Paging process over time

- Initially, pages are allocated from memory
- When memory fills up, allocating a page requires some other page to be evicted
- Evicted pages go to disk, more precisely to the swap file/backing store
- Done by the OS, and transparent to the application

Improvement : **demand paging** (a.k.a lazy loading) in a page from disk into memory only if an attempt is made to access it (the main memory becomes a cache for disk)