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

Extreme design : **demand paging** paging in a page from disk into memory only if an attempt is made to access it (the main memory becomes a cache for disk)