Simple notes about paging

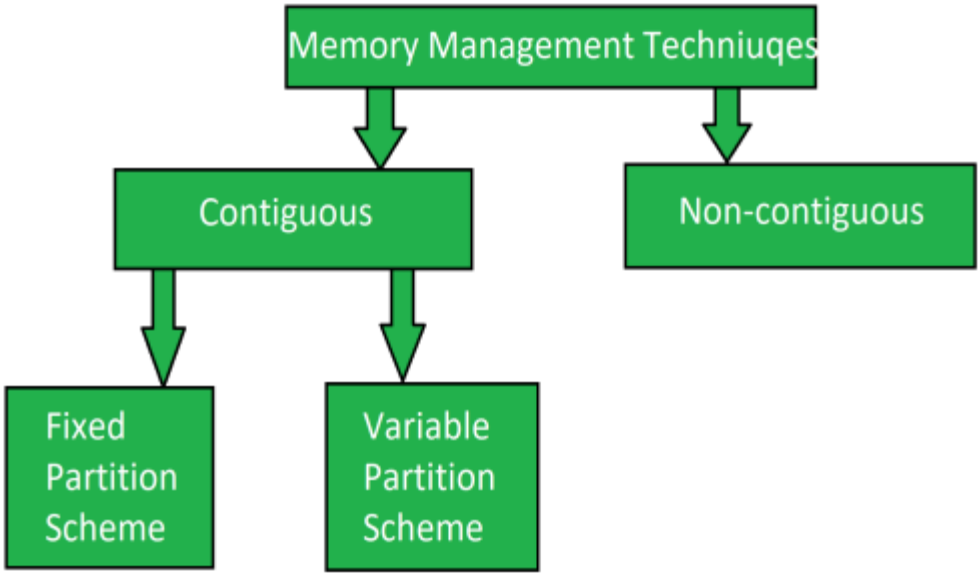
Contiguous memory management methods;

Internal & external fragmentation? Where they come and what are solutions?

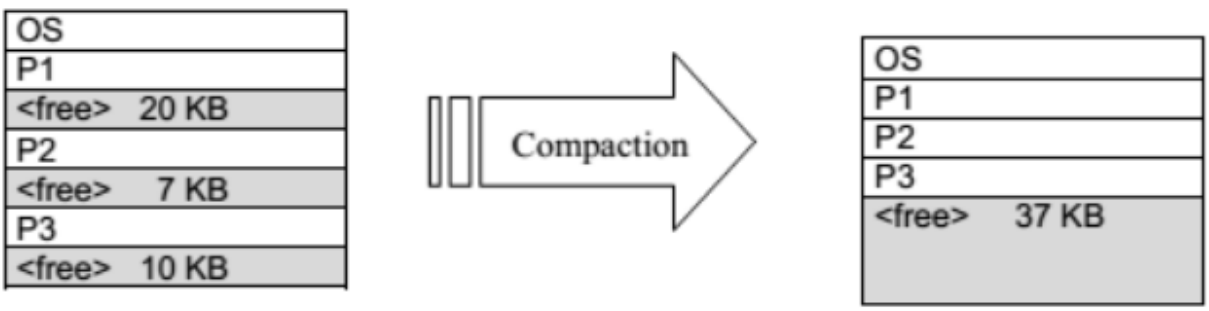
Address space

Physical address

Logical address



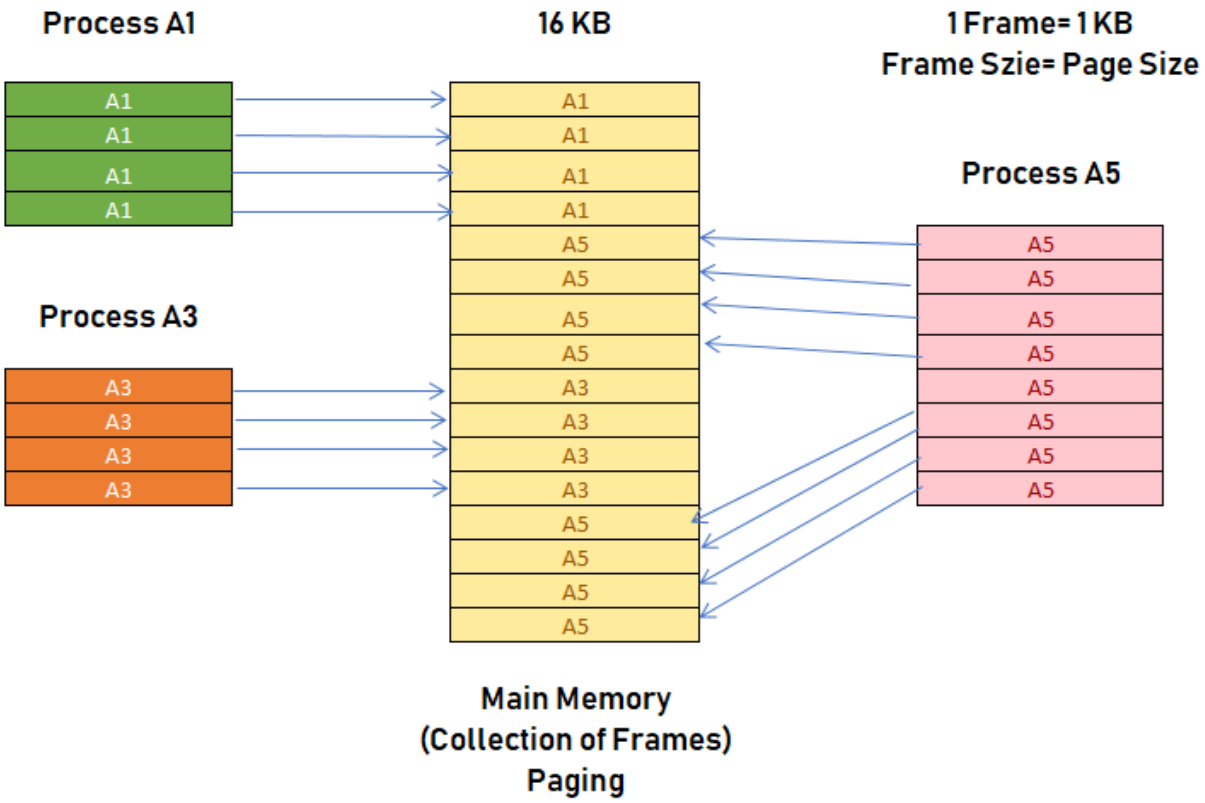
compaction solution for contiguous memory allocation, shortages?

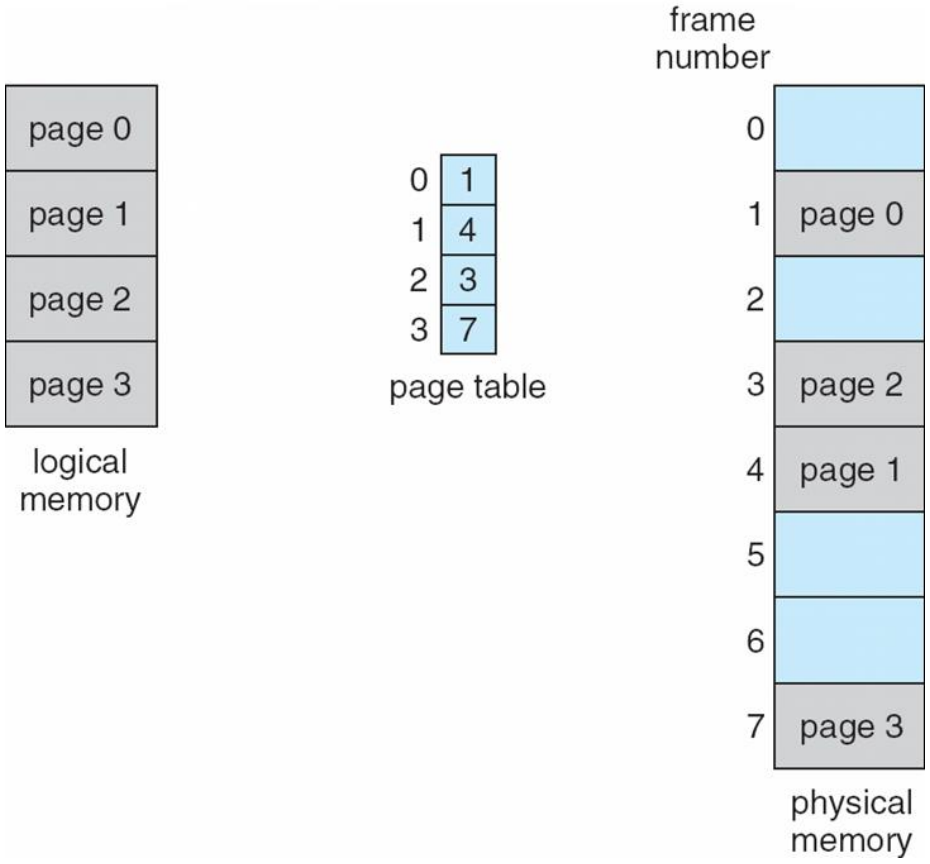


Paging solution

What is Paging in OS?

Paging is a storage mechanism that allows OS to retrieve processes from the secondary storage into the main memory in the form of pages. In the Paging method, the main memory is divided into small fixed-size blocks of physical memory, which is called frames. The size of a frame should be kept the same as that of a page to have maximum utilization of the main memory and to avoid external fragmentation. Paging is used for faster access to data, and it is a logical concept.





Advantages of Paging

- Easy to use memory management algorithm
- No need for external Fragmentation

cons of Paging:

- May cause Internal fragmentation.
- Page tables consume additional memory.