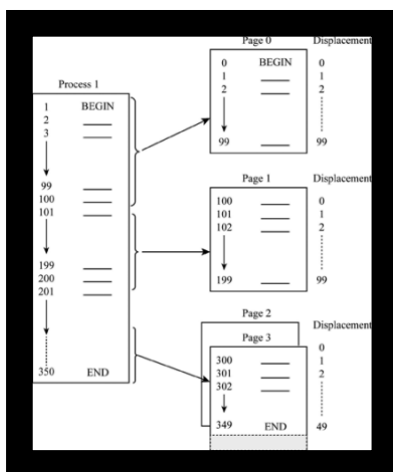


Paged Allocation

Paged allocation in memory management divides computer physical memory (Random Access Memory – RAM) into fixed size of memory units called page frames (memory block size). Also divides virtual address space to size of the pages. The main advantage of using paged allocation is, an empty page frame can be used by any job however, need to keep track of number of pages and where the pages of individual job are located in memory. In other words memory can be used efficiently and each job runs on its own address space.

Example



From the above figure, the size of each page is 100 memory locations. The memory utilized by the process1 in the above given figure is 350 memory locations where it takes 4 pages to store 350 memory locations. That is, in memory block 0 or

page 0 holds first 100 memory locations of data. In second page, memory locations of 100 to 199 are stored and so on.

Steps to determine exact location of the instruction or code **line**

- Find the page number and displacement.
- Determine memory block size which contains required page.
- Obtain the address of beginning of the first memory block.
- Add the displacement to starting address of memory blocks if the required page is in other than page 0.

When the system moves required pages from main memory to secondary memory it gives rise to demand paging, in other words, moving only the required page to physical memory.

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