T21287
Jayesh Patil TE IT

Assignment no. 6

Aim :- To implement page replacement algorithm using virtual memory

objective :- To study
- virtual Memory Management
- Page replacement Algorithm

In page replacement if there is no free Page frame then we found out that is not currently used then we free that frame and the new page is loaded in that frame.
The complete process can be summarised into following steps.

1) find the location of derived Page on the disk
2) find a free frame.
   a) If their is a frame free use it
   b) If their is no free frame use a page replacement algorithm to select a victim frame.
   c) write the victim page to the disk. chan the page and frame table accordingly

3) Read the desired page into the newly frame change the page of from table.

Algorithm

1) First in first out FIFO
   a) check if any frame is not used
   b) If a frame is freeload the new page into the free space.
   c) otherwise find the page which has arrived first and replace this page with newly arrived page.

2) Least recently used (LRU)
   a) check if any frame is not used
   b) If a frame is free load the new page into the frame (free)
   c) otherwise find the page that is least recently used, i.e the page that has not been used for the longest period of time and replace this page with newly arrived page.

3) Optimal page Replacement
   a) check if only frame is not used
   b) If a frame load the new page into free from.
   c) otherwise replace the place that will not be used for longer period of time.

Conclusion :-

Thus, we have implement the page replacement algorithm using virtual memory