

Report

Implementation of page replacement algorithms using

Linked Lists:

- I have implemented page replacement algorithms(fifo and lru) using Linkedlists, Because there are many advantages for linked lists over other data structures like Dynamic size, easy insertion and deletion, etc.
- Created functions for Creating a linked list, Searching, Inserting at head, Inserting at tail, removing the list which are used in FIFO and LRU functions.
- In FIFO page replacement algorithm, I have considered no of frames given and divided them and implemented the algorithm by checking whether the element is present in the frame otherwise, inserting it in the place first in first out order
- In LRU page replacement algorithm, I have considered no of frames given and divided them and implemented the algorithm by checking whether the element is present in the frame otherwise, inserting it in least recently used order.
- Dirty bit is a boolean bit which is used to increase number of reads when it is 0 and number of writes when it is 1.
- The last frame contents are displayed as output
- The total no of reads and writes are also counted and displayed.