

October 1, 2019

Topic: Virtual Memory Management

Q: Write a program to develop a virtual memory simulator. Given a page size, virtual address space and physical memory. Virtual address sequence list and Read/Write operation for every reference is given below. The page table(**consist of frame no., reference bit and dirty bit**) and the frame table should be displayed every time when there is a page fault.

Read the inputs from a file and also count the total number of page faults.

For Example :

Page size : 1k

Virtual address space : 14 bit

Physical memory : 4KB

Virtual Address Sequence: 21(R), 5933(W), 8084(R), 4956(W), 5229(R), 9618(W), 2486(R), 2833(W), 1012(R), 333(W), 4956(R), 1024(W), 2048(R), 9999(W), 8542(R), 3756(W), 4536(R)

Use FIFO as a page replacement algorithm.