1(25pts) Consider the following sequence of virtual memory references generated by a single program in a paging system:
10,115,160,75,15,352,295,842,246,137,250,344
a) Derive the corresponding page reference string, assuming a page size of 100 words (Assume that the first page is page 0.).
b) Determine the number of page faults, failure frequency rate, and maximum number of page swaps using the following replacement strategies and assuming three page frames are available in memory:
i) FIFO
ii) LRU
iii) CLOCK

2(15pts) Exercise 10.3 on p364 in your text.

3(15pts) Exercise 10.4 on p365 in your text.

4(15pts) Exercise 10.5 on p365 in your text.

5(15pts) Exercise 10.8 on p365 in your text.

6(15pts) Using an Operating System of your choice (excluding Windows and Unix) describe the memory management scheme. Be sure to include: Is it virtual memory? Is paging or segmentation used? How is address translation performed? What is the replacement policy used? You may need to assume the implementation of the OS on a specific platform.