

Assignment 3

- 1a. Explain the concept of swapping with a diagram.
 - 1b. Explain the disadvantages of swapping in terms of context switching.
2. The following jobs are loaded into memory using fixed partition. How would the first fit and best fit algorithms place the jobs? Assume all the jobs arrive at 0.

List of Jobs	Size	Turnaround Time
Job1	100k	3
Job2	10k	1
Job3	35k	2
Job4	15k	1
Job5	23k	2
Job6	6k	1
Job7	25k	1
Job8	55k	2
Job9	88k	3
Job10	100k	3

Memory Block	Size
Block1	50k
Block2	200k
Block3	70k
Block4	115k
Block5	15k

- 3a. Explain the different techniques for structuring the page table.
- 3b. Consider the following segment table:

Segment	Base	Length
0	219	600
1	2300	14
2	1327	580
3	1952	96

What are the physical addresses for the logical address: (0, 430) and (3, 400)

- 4a. Explain the different multithreading models in detail. What are the different ways of implementing a thread library?
 - 4b. Give the Multithreaded C program using the Pthread API (function) for computing the factorial of a non-negative integer.
5. Explain the threading issues in detail.