

Quiz-4

Name: _____ ID: _____ Section: _____

Consider a system with 120MB of available memory and a list of 10 processes with the following memory requirements. Using a variable-sized partitioning approach, allocate memory to these processes using the First Fit, Best Fit, and Worst Fit algorithms and compare the results. Fill in the blanks with information of the original block number where each process has been assigned to. Write down 'N/A' if you are unable to allocate any location. Finally, mention the most suitable algorithm in this scenario. [15 Marks]

	Memory
1	13 MB
2	24 MB
3	45 MB
4	38 MB

Processes	Size (MB)	First Fit	Best Fit	Worst Fit
P1	10			
P2	5			
P3	10			
P4	15			
P5	25			
P6	20			
P7	15			
P8	10			
P9	5			
P10	5			

	Memory
1	13 MB
2	24 MB
3	45 MB
4	38 MB

Processes	Size (MB)	First Fit	Best Fit	Worst Fit
P1	10	1	1	3
P2	5	2	2	4
P3	10	2	2	3
P4	15	3	4	4
P5	25	3	3	3
P6	20	4	3	2
P7	15	4	3	4
P8	10	N/A	N/A	1
P9	5	2	4	N/A
P10	5	3	2	N/A

i.f = i.f = 10 i.f = 10

Here for first & best fit
we could allocate 9 process
and the internal fragmentation
is same for both the
algo. So, both works same
here. and both outperforms
worst fit.