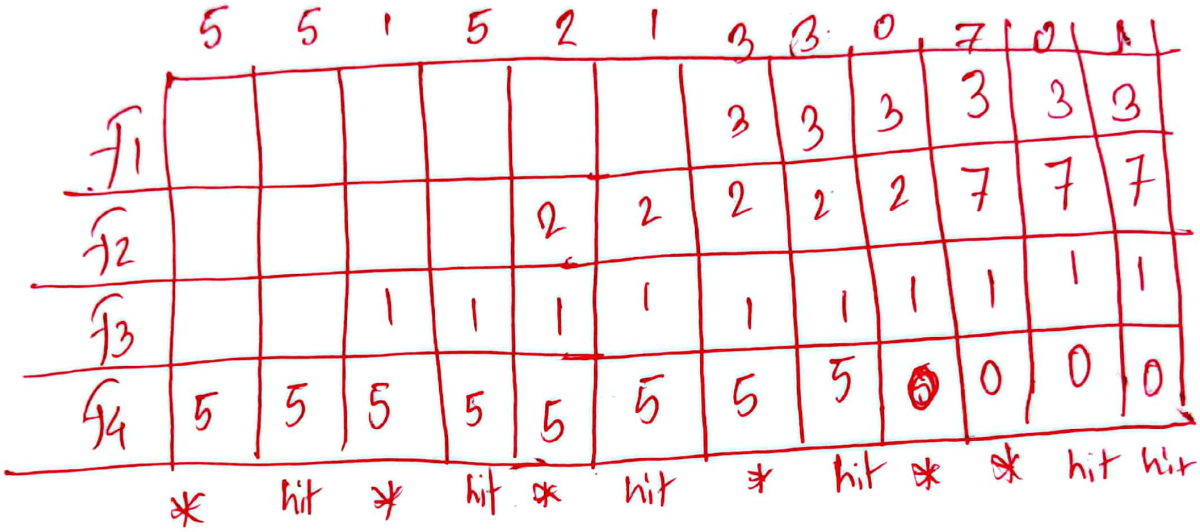
CSE321 Quiz 4

Total Marks: 20

Name: _____ **ID:** _____ **Sec:** _____

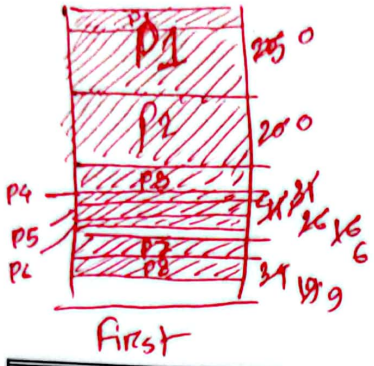
[CO6] Consider a computer with a main memory of size 4 and a page reference string of 7 pages: **[5, 5, 1, 5, 2, 1, 3, 3, 0, 7, 0, 1]**. The page reference string represents the order in which the pages are accessed by a program. Apply LRU algorithm to simulate the page replacements that occur when the main memory can hold at most 4 pages at a time. Record the number of page faults that occur. **[5 Marks]**

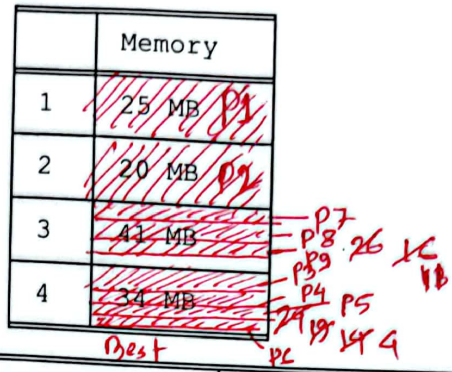


Number of faults = 6

[CO6] 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]





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

All the algorithm will perform the same in this given scenario.

Bonus Task: Make a unique meme using your own creativity revalant to CSE321 course.

[2.5 Marks]