Project Report

Implementation of FIFO & LRU Optimal Page Replacement

Submitted To

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Report on Implementation of FIFO & LRU Optimal Page Replacement

Description

Generate 1000 random values and store in a file. Write a program in Python where LRU and FIFO algorithm have to be implemented. Block size input will be taken from console. Generate a performance diagram where Y axis is number of block and X axis is hit counts for LRU and FIFO.

Implementation & Graphs

At first, we have run our program and found hit points and graph for FIFO and LIFO.

FIFO

Cache Size	FIFO (Hit Counts)
1	2
2	2
3	6
4	5
5	5
6	6
7	7
8	9
9	13
10	19

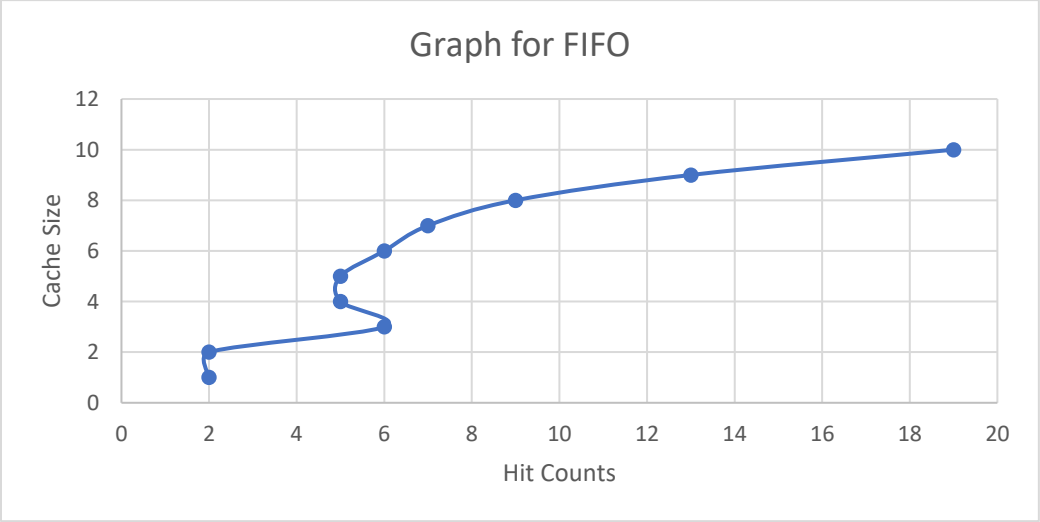

Fig. Graph for FIFO

LRU

Cache Size	LRU (Hit Counts)
1	0
2	1

3	3
4	3
5	6
6	4
7	5
8	6
9	11
10	8

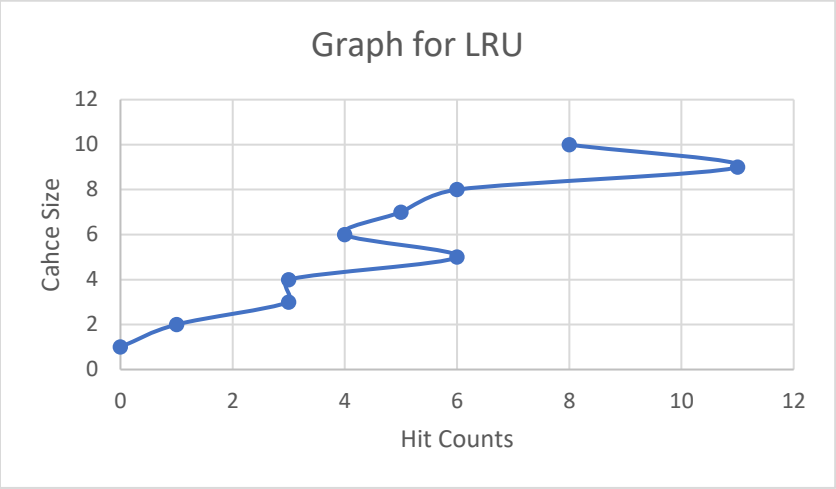

Fig. Graph for LRU

Comparison on FIFO & LRU

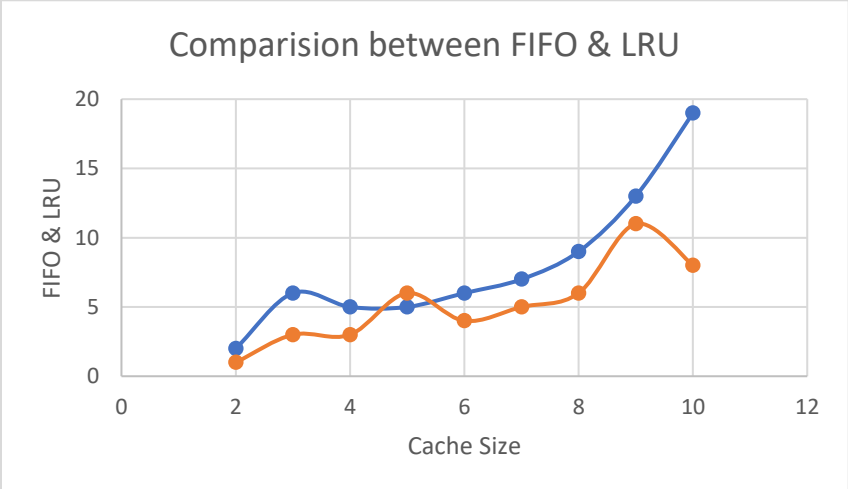

Fig. Graph for FIFO & LRU

Conclusion

So, here we can see that FIFO is performing well because of better hit count as compared to LRU. However, we will get optimal result if we use FIFO in this case.