**Project Report**

**Implementation of FIFO & LRU Optimal Page Replacement**

**Submitted To**

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Course Code: CSE360

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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 counts 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.