**University of Engineering and Technology, Lahore**

**Operating Systems Lab.**

**Semester: 6th Session: 2019-23**

**Lab-06 (Individual)**

**Submission Date:** 28-03-22 (Before 12:00 pm)

**Note**: Understanding the assignment is part of the assignment.

**FIFO PAGE REPLACEMENT ALGORITHM**

**AIM:**

To implement page replacement algorithms FIFO (First In First Out).

**ALGORITHM:**

**FIFO:**

Step 1: Create a queue to hold all pages in memory

Step 2: When the page is required replace the page at the head of the queue

Step 3: Now the new page is inserted at the tail of the queue

**OUTPUT:**

**FIFO PAGE REPLACEMENT ALGORITHM**

Enter no.of frames....4

Enter number of reference string.. 6

Enter the reference string.. 5 6 4 1 2 3

**The given reference string: ...................................... 5 6 4 1 2 3**

Reference np5-> 5 -1 -1 -1

Reference np6-> 5 6 -1 -1

Reference np4-> 5 6 4 -1

Reference np1-> 5 6 4 1

Reference np2-> 2 6 4 1

Reference np3-> 2 3 4 1

**No.of pages faults...6**

**LRU PAGE REPLACEMENT ALGORITHM**

**AIM:**

To implement page replacement algorithm LRU (Least Recently Used).

**ALGORITHM:**

Step 1: Create a queue to hold all pages in memory

Step 2: When the page is required replace the page at the head of the queue

Step 3: Now the new page is inserted at the tail of the queue

Step 4: Create a stack

Step 5: When the page fault occurs replace page present at the bottom of the stack

**OUTPUT:**

Enter no.of Frames....3

Enter no.of reference string..6

Enter reference string. 6 5 4 2 3 1

LRU PAGE REPLACEMENT ALGORITHM

The given reference string:

…………………. 6 5 4 2 3 1

Reference NO 6-> 6 -1 -1

Reference NO 5-> 6 5 -1

Reference NO 4-> 6 5 4

Reference NO 2-> 2 5 4

Reference NO 3-> 2 3 4

Reference NO 1-> 2 3 1

No.of page faults...6