# **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. 654231

# 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