Mawlana Bhashani Science and Technology University

Lab-Report

Report No: 11

Course code: ICT-3110

Course title: Operating Systems Lab

Date of Performance:

Date of Submission: 11/09/2020

Submitted by

Name: Golam Kibria Tuhin

ID:IT-18015

3th year 1ndsemester

Session: 2017-2018

Dept. of ICT

Submitted To

Nazrul Islam

Assistant Professor

Dept. of ICT

MBSTU.

Name of the lab report : Implementation of FIFO page replacement Algorithm.

Q.1 What is FIFO page replacement algorithm?

Ans: This is the simplest page replacement algorithm. In this algorithm, the operating system keeps track of all pages in the memory in a queue, the oldest page is in the front of the queue. When a page needs to be replaced page in the front of the queue is selected for removal

Q.2 How to implemented in C?

Ans:

```
#include<stdio.h>
int main()
{
  int i,j,n,a[45],f[30],no,k,av,count=0;
  printf("\n ENTER THE NUMBER OF PAGES: ");
  scanf("%d",&n);
  printf("\n ENTER THE PAGE NUMBER : ");
  for(i=1; i<=n; i++)
    scanf("%d",&a[i]);
  printf("\n ENTER THE NUMBER OF FRAMES :");
  scanf("%d",&no);
  for(i=0; i<no; i++)
    f[i] = -1;
  j=0;
  printf("\tref string\t page frames\n");
  for(i=1; i<=n; i++)
```

```
{
    printf("%d\t\t",a[i]);
    av=0;
    for(k=0; k<no; k++)
      if(f[k]==a[i])
         av=1;
    if (av==0)
    {
      f[j]=a[i];
      j=(j+1)%no;
      count++;
      for(k=0; k<no; k++)
         printf("%d\t",f[k]);
    }
    printf("\n");
  }
  printf("Page Fault Is %d",count);
  return 0;
}
```

Output:

```
ENTER THE NUMBER OF PAGES: 5
ENTER THE PAGE NUMBER : 1 2 4 0 1
 ENTER THE NUMBER OF FRAMES: 4
       ref string page frames
                        -1
                     -1
              1
                                  -1
                                 -1
              1
                           -1
                     2
                    2
              1
                           4
                                  -1
              1
                   2
                            4
                                   0
Page Fault Is 4
Process returned 0 (0x0) execution time: 20.822 s
Press any key to continue.
```