# Mawlana Bhashani Science and Technology University
# Lab-Report

Lab Report No:  11
Lab Report Name: Implementation of FIFO page replacement Algorithm
Course code: ICT-3110
Course title:  Operating System Lab
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**Name of the Lab Report:** Implementation of FIFO page replacement Algorithm

**Objective:** FIFO page replacement algorithm Definition & executable code in c are followed.

## 1. What is FIFO page replacement algorithm?

**Answer:** 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

## 2. How to implemented in C?

**Answer:**

**Source Code:**

```
#include<stdio.h>

int main()
{
            int i,j,n,a[50],frame[10],no,k,avail,count=0;
            printf("\nENTER THE NUMBER OF PAGES:\n");
            scanf("%d",&n);
            printf("\nENTER THE PAGE NUMBER :\n");
            for(i=1; i<=n; i++)
                scanf("%d",&a[i]);
            printf("\nENTER THE NUMBER OF FRAMES :");
            scanf("%d",&no);
            for(i=0; i<no; i++)
                frame[i]= -1;
            j=0;
            printf("\tref string\t page frames\n");
            for(i=1; i<=n; i++) {
                printf("%d\t\t",a[i]);
                avail=0;
                for(k=0; k<no; k++)
```

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

**Output:**

```
 ENTER THE NUMBER OF PAGES:
7

 ENTER THE PAGE NUMBER :
7 0 1 2 0 3 0 4 2 3 0 3 2 1 2

 ENTER THE NUMBER OF FRAMES :    ref string
7                7      -1      -1      -1
0                7       0      -1      -1
1                7       0       1      -1
2                7       0       1       2
0
3                3       0       1       2
0
Page Fault Is 5
```