

OPERATING SYSTEM - CS23431

EX 11(A)

FIFO PAGE REPLACEMENT

NAME: MOUNAMITHRA ROLL NO: 230701197

PROGRAM:

```
#include <stdio.h>
```

```
int main() {  
  
    int n,frame_size,front=0,count=0,page_faults=0;  
  
    printf("Enter size of reference string: ");  
  
    scanf("%d",&n);  
  
    int pages[n];  
  
    for(int i=0;i<n;i++)  
    {  
  
        printf("Enter [%d]: ",i+1);  
  
        scanf("%d",&pages[i]);  
  
    }  
  
    printf("Enter page frame size: ");  
  
    scanf("%d",&frame_size);  
  
    int mem[frame_size];  
  
    for (int i = 0; i < n; i++) {  
  
        int found = 0;  
  
        for (int j = 0; j < count; j++) {  
  
            if (mem[j] == pages[i]) {  
  
                found = 1;  
  
                break;  
  
            }  
  
        }  
  
    }  
}
```

```

printf("%d -> ", pages[i]);

int f=1;

if (!found) {

    if (count < frame_size) {

        mem[count++] = pages[i];

    } else {

        mem[front] = pages[i];

        front = (front + 1) % frame_size;

    }

    p a g e _ f a u l t s + + ;

}

else

{

    f=0;

    printf("No Page Fault ");

}

if(f)

{

    for (int j = 0; j < count; j++) {

        printf("%d ", mem[j]);

    }

}

printf("\n");

}

printf("\nTotal Page Faults: %d\n", page_faults);

return 0;

}

```

OUTPUT:

```
Enter size of reference string: 7
Enter [1]: 7
Enter [2]: 0
Enter [3]: 1
Enter [4]: 2
Enter [5]: 0
Enter [6]: 3
Enter [7]: 0
Enter page frame size: 3
7 -> 7
0 -> 7 0
1 -> 7 0 1
2 -> 2 0 1
0 -> No Page Fault
3 -> 2 3 1
0 -> 2 3 0

Total Page Faults: 6
```