OPERATING SYSTEM - CS23431 EXP 11(A)

FIFO PAGE REPLACEMENT

NAME: Dhanvin PR ROLL NO: 230701071

```
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[i] == pages[i]) {
          found = 1;
          break;
       }
     }
     printf("%d -> ", pages[i]);
     int f=1;
     if (!found) {
       if (count < frame size) {</pre>
          mem[count++] = pages[i];
       } else {
          mem[front] = pages[i];
          front = (front + 1) % frame size;
```

```
}
    page_faults++;
}
    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;
}
</pre>
```

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
```