OPERATING SYSTEM - CS23431

EXP 11(A)

FIFO PAGE REPLACEMENT

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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;
```

```
            }
            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;
}
```

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
```