**OPERATING SYSTEM - CS23431**

**EXP 11(B)**

**LRU PAGE REPLACEMENT**

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**PROGRAM:**

#include <stdio.h>

int main() {

int n,frame\_size,count=0,page\_faults=0;

printf("Enter size of reference string: ");

scanf("%d",&n);

int page[n];

for(int i=0;i<n;i++)

{

printf("Enter [%d]: ",i+1);

scanf("%d",&page[i]);

}

printf("Enter page frame size: ");

scanf("%d",&frame\_size);

int mem[frame\_size];

for (int i = 0; i < n; i++) {

int top = -1;

int f=0;

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

if (mem[j] == page[i]) {

top = j;

break;

}

}

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

if (top!=-1) {

for(int j=0;j<count-1;j++)

{

mem[j]=mem[j+1];

}

mem[count-1]=page[i];

printf("No page fault\n");

}

else

{

f=1;

if(count<frame\_size)

{

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

}

else

{

for(int j=0;j<frame\_size;j++)

{

mem[j]=mem[j+1];

}

mem[frame\_size-1]=page[i];

}

page\_faults++;

}

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:**

