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ROLL NO:27

```
#include<stdio.h>
int fr[3], n, m;
void display();
void main()
{
int i,j,page[20],fs[10]; int
max,found=0,lg[3],index,k,l,flag1=0,flag2=0,pf=0; float
pr;
printf("Enter length of the reference string: ");
scanf("%d",&n); printf("Enter the reference
string: ");
for(i=0;i<n;i++)
scanf("%d",&page[i]);
printf("Enter no of frames: ");
scanf("%d",&m);
for(i=0;i<m;i++) fr[i]=-1;
pf=m;
for(j=0;j<n;j++)
{ flag1=0; flag2=0;
        for(i=0;i<m;i++)
        {
                if(fr[i]==page[j])
                { flag1=1; flag2=1;
                        break;
                }
        }
if(flag1==0) {
for(i=0;i<m;i++) {
if(fr[i]==-1)
{
fr[i]=page[j]; flag2=1;
break; }}} if(flag2==0)
{ for(i=0;i<m;i++)
lg[i]=0;
for(i=0;i<m;i++) {
for(k=j+1;k<=n;k++) {
if(fr[i]==page[k]) {
lg[i]=k
-j;
break; }}}
found=0;
for(i=0;i<m;i++) {
```

```
if(lg[i]==0) {
index=i; found = 1;
break; } }
if(found==0) {
max=lg[0]; index=0;
for(i=0;i<m;i++)
{
if(max<lg[i])
{ max=lg[i];
index=i;
}
}
}
fr[index]=page[j];
pf++; }
display();
}
printf("Number of page faults : %d\n", pf); pr=(float)pf/n*100;
printf("Page fault rate = %f \n", pr);
}
void display()
{
int i; for(i=0;i<m;i++) printf("%d\t",fr[i]);
printf("\n");
}
```

OUTPUT:

```
pvg-aids-ml@pvgaidsml-HP-ProDesk-400-G4-SFF:~/Desktop/harshada02$ gcc
pract_6b.c -o pract_6b
pvg-aids-ml@pvgaidsml-HP-ProDesk-400-G4-SFF:~/Desktop/harshada02$ ./pract_6b
Enter the length of reference string -- 5
Enter the reference string -- 3
2
1
4
0
Enter the number of frames -- 4
The Page Replacement process is --
3       -1      -1      -1      PF No. -- 1

3       2       -1      -1      PF No. -- 2

3       2       1       -1      PF No. -- 3

3       2       1       4       PF No. -- 4

0       2       1       4       PF No. -- 5
```

The number of page faults using LRU are 5