```
#include<stdio.h>
int findLRU(int time[], int n)
{
int i, minimum = time[0], pos = 0;
for(i = 1; i < n; ++i)
{
if(time[i] < minimum)
{
minimum = time[i];
pos = i;
}
}
return pos;
}
int main()
{
   int no_of_frames, no_of_pages, frames[10], pages[30], counter = 0, time[10], flag1, flag2, i, j, pos,
faults = 0;
printf("Enter number of frames: ");
scanf("%d", &no_of_frames);
printf("Enter number of pages: ");
scanf("%d", &no_of_pages);
printf("Enter reference string: ");
   for(i = 0; i < no_of_pages; ++i)
           {
    scanf("%d", &pages[i]);
   }
for(i = 0; i < no_of_frames; ++i){
    frames[i] = -1;
   }
   for(i = 0; i < no_of_pages; ++i)
```

```
            {
    flag1 = flag2 = 0;
    for(j = 0; j < no_of_frames; ++j)
            {
    if(frames[j] == pages[i])
            {
    counter++;
    time[j] = counter;
   flag1 = flag2 = 1;
   break;
   }
    }
    if(flag1 == 0)
            {
for(j = 0; j < no_of_frames; ++j)
{
    if(frames[j] == -1)
            {
    counter++;
    faults++;
    frames[j] = pages[i];
    time[j] = counter;
    flag2 = 1;
    break;
    }
    }
    }
    if(flag2 == 0){
    pos = findLRU(time, no_of_frames);
    counter++;
    faults++;
```

```
    frames[pos] = pages[i];
    time[pos] = counter;
    }
    printf("\n");
    for(j = 0; j < no_of_frames; ++j)
            {
    printf("%d\t", frames[j]);
    }
}
printf("\n\nTotal Page Faults = %d", faults);
   return 0;
}
```