Code:

```
#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=1;
		}
	}
	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;
}
```

Output :

```
Enter number of frames: 3
Enter number of pages: 6
Enter reference string: 5 7 5 6 7 3

5       -1      -1
5       7       -1
5       7       -1
5       7       6
5       7       6
3       7       6

Total page faults = 4
```