

Page replacement policies for handling page faults eg FIFO , LRU

```

#include<stdio.h>
#define MAX 20
int frames[MAX],ref[MAX],mem[MAX][MAX],faults,sp,m,n;
void accept()
{
    int i;
    printf("Enter no.of frames:");
    scanf("%d", &n);
    printf("Enter no.of references:");
    scanf("%d", &m);
    printf("Enter reference string:\n");
    for(i=0;i<m;i++)
    {
        printf("[%d]= ",i);
        scanf("%d",&ref[i]);
    }
}
void disp()
{
    int i,j;
    for(i=0;i<m;i++)
        printf("%3d",ref[i]);
    printf("\n\n");
    for(i=0;i<n;i++)
    {
        for(j=0;j<m;j++)
        {
            if(mem[i][j])
                printf("%3d",mem[i][j]);
            else
                printf(" ");
        }
        printf("\n");
    }
    printf("Total Page Faults: %d\n",faults);
}
int search(int pno)
{
    int i;
    for(i=0;i<n;i++)
    {
        if(frames[i]==pno)
            return i;
    }
    return -1;
}
void fifo()
{
    int i,j;
    for(i=0;i<m;i++)
    {
        if(search(ref[i])!=-1)
        {

```

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frames[sp] = ref[i];
sp = (sp+1)%n;
faults++;
for(j=0;j<n;j++)
mem[j][i] = frames[j];
}
}
}
int main()
{
accept();
fifo();
disp();
return 0;
}

```

Output :-

```

PS C:\Users\dgs\Desktop\OS OTT\os 1 vivek\OS 4 TO 10> cd '
RunnerFile' ; if ($?) { .\tempCodeRunnerFile }
Enter no.of frames:5
Enter no.of references:4
Enter reference string:
[0]=2
[1]=6
[2]=4
[3]=1
  2  6  4  1

  2  2  2  2
  6  6  6
  4  4
  1

Total Page Faults: 4
PS C:\Users\dgs\Desktop\OS OTT\os 1 vivek\OS 4 TO 10>

```