#include<stdio.h>

void main()

{

int i,j,n,fm,a[10],top=-1,s[20],flag,count=0;

float hit;

printf("\nEnter the no. of page frames on main memory: ");

scanf("%d",&fm);

for(i=0;i<fm;i++)

{

a[i]=0;

}

printf("\nEnter the total no. of pages you want to enter into main memory:");

scanf("%d",&n);

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

{

printf("\nEnter the page [%d] to be entered : ",i);

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

}

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

{

flag=0;

**if(i==0)**

**{**

**printf("\nPAGE FAULT occured.\t page %d is added ",s[i]);**

**top++;**

**a[top]=s[i];**

**}**

**else**

{

for(j=0;j<fm;j++)

{

if(s[i]==a[j])

{

printf("\**nPAGE SUCESSFUL** \t page %d is already included",s[i]);

**flag=1;**

count++;

break;

}

}

**if(flag==0)**

{

***if(top==(fm-1)) //Apply FIFO since frame is full***

{

printf("\npage fault occured.\t page %d is included ",s[i]);

for(j=0;j<(top);j++)

a[j]=a[j+1];

a[j]=s[i];

}

else // Frame isn’t full, add new page to frame

{

printf("\nPAGE FAULT occured.\t page %d is added ",s[i]); top++;

a[top]=s[i]; }

}

}

}

hit=(float)count/n;

printf("\n The hit ratio is : %f\n",hit);

}