import java.io.\*;

class LRU

{

public static void main(String args[])throws IOException

{

BufferedReader obj=new BufferedReader(new InputStreamReader(System.in));

int f,page=0,ch,pgf=0,n,chn=0,phit=0;

boolean flag;

int pages[];

int pt=0;

int k=0;

System.out.println("enter no. of frames: ");

f=Integer.parseInt(obj.readLine());

int frame1[]=new int[f];

int a[]=new int[f];

int b[]=new int[f];

for(int i=0;i<f;i++)

{

frame1[i]=-1;

a[i]=-1;

b[i]=-1;

}

System.out.println("enter the no of pages ");

n=Integer.parseInt(obj.readLine());

pages=new int[n];

System.out.println("enter the page no ");

for(int j=0;j<n;j++)

pages[j]=Integer.parseInt(obj.readLine());

do{

int pg=0;

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

{

page=pages[pg];

flag=true;

for(int j=0;j<f;j++)

{

if(page==frame1[j])

{flag=false; break;}

}

for(int j=0;j<f && flag;j++)

{

if(frame1[j]==a[f-1])

{k=j;

break;}

}

if(flag)

{

frame1[k]=page;

System.out.println("frame :" );

for(int j=0;j<f;j++)

System.out.print(frame1[j]+" ");

pgf++;

System.out.println();

}

else

{

System.out.println("frame :" );

for(int j=0;j<f;j++)

System.out.print(frame1[j]+" ");

System.out.println();

}

int p=1;

b[0]=page;

for(int j=0;j<a.length;j++)

{

if(page!=a[j] && p<f)

{

b[p]=a[j];

p++;

}

}

for(int j=0;j<f;j++)

{

a[j]=b[j];

}

chn++;

}

}while(chn!=n);

phit=n-pgf;

System.out.println("Page fault:"+pgf);

System.out.println("Page hit:"+phit);

}

}