package pakage;

import java.io.\*;

public class FIFO {

public static void main(String[] args) throws Exception{

int f,p,num=0, pageHit=0,pageFault=0;

int pages[];

int frame[];

boolean flag = true;

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

System.out.println("Enter number of frames : ");

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

System.out.println("Enter number of pages : ");

p = Integer.parseInt(br.readLine());

frame = new int[f];

pages = new int[p];

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

frame[i] = -1;

System.out.println("Enter page number : ");

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

pages[i] = Integer.parseInt(br.readLine());

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

{

flag = true;

int page = pages[i];

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

{

if(frame[j] == page)

{

flag = false;

pageHit++;

break;

}

}

if(num == f)

num = 0;

if(flag)

{

frame[num] = page;

num++;

}

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

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

System.out.print(frame[k]+" ");

System.out.println();

}

pageFault=p-pageHit;

System.out.println("No. of page hit : "+pageHit);

System.err.println("Hit ratio:"+(float)((float)pageHit/p));

System.out.println("No. of page fault:"+pageFault);

System.err.println("Fault ratio:"+(float)((float)pageFault/p));

}

}