import java.util.Scanner;

public class CustomCollDemo {

public static void main(String[] args) {

int num[] = new int[10];

int size = 0;

for(int i=0;i<10;i++){

num[i] = i+1;

System.out.println(num[i]);

size++;

System.out.println(size);

}

Scanner sc = new Scanner(System.in);

System.out.println("Choose the option:");

System.out.println("1.Increase the length of array");

System.out.println("2.Insert element at specified index");

System.out.println("3.Delete element at specified index");

int option = sc.nextInt();

if(option == 1){

if(size == num.length){

int number[] = new int[num.length\*2];

for(int i=0;i<num.length;i++){

number[i] = num[i];

}

num = number;

System.out.println("New Size of the array is " +num.length);

for(int i=0;i<num.length;i++){

System.out.println(num[i]);

}

}

}

else if(option == 2){

int number[] = new int[num.length + 1];

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

number[j] = num[j];

}

num = number;

System.out.println("New Size of the array is " +num.length);

System.out.println("Enter specified index to insert:");

int inindex = sc.nextInt();

System.out.println("Enter specified value:");

int val = sc.nextInt();

for(int i =num.length-1; i >= (inindex-1); i--)

{

num[i] = num[i-1];

}

num[inindex-1] = val;

for(int n=0;n<num.length;n++){

System.out.println(num[n]);

}

sc.close();

}

else if(option == 3){

System.out.println("Enter specified index to remove:");

int index = sc.nextInt();

if(index < num.length){

for(int i = index;i< num.length-1;i++){

num[i]=num[i+1];

System.out.println(num[i]);

}

}

else{

System.out.println("Index specified does not exist");

}

}

}

}