package day8;

import java.util.Scanner;

class Elem{

public int value;

public int min;

public Elem next;

public Elem(int value, int min){

this.value = value;

this.min = min;

}

}

public class Min\_Stack {

public static Elem top;

public Min\_Stack() {

}

public static void push(int x) {

if(top == null){

top = new Elem(x, x);

}else{

Elem e = new Elem(x, Math.min(x,top.min));

e.next = top;

top = e;

}

}

public static void pop() {

if(top == null)

return;

Elem temp = top.next;

top.next = null;

top = temp;

}

public static int top() {

if(top == null)

return -1;

System.out.println(top.value);

return top.value;

}

public static int getMin() {

if(top == null)

return -1;

System.out.println(top.min);

return top.min;

}

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter the choice\n1.push\n2.pop\n3.top\n4.getMin");

int choice = sc.nextInt();

switch(choice){

case 1:

Scanner s = new Scanner(System.in);

System.out.println("Enter the number");

int x = 10;

push(x);

break;

case 2:

pop();

break;

case 3:

top();

break;

case 4:

getMin();

break;

default:

System.out.println("Enter Valid Option");

}

}

}