高级语言程序设计实验报告

1. 实验题目

<1>运算程序清单的程序

<2>编写一个程序，读入个数不确定的考试分数，并判断有多少个成绩是大于或等于或小于

平均分的。输入一个负数表示输入的结束，假设最高分为100

1. 实验目的

熟悉JAVA中数组的使用

1. 实验过程和结果

<1>程序清单运行

源代码：

package first;

public class First{

public static void main(String args[]){

int[] deck=new int[52];

String[] suits={"Spades","Hearts","Diamonds","Clubs"};

String[] ranks={"Ace","2","3","4","5","6","7","8","9","10","Jack","Queen","King"};

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

deck[i]=i;

}

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

int index=(int)(Math.random()\*deck.length);

int temp=deck[i];

deck[i]=deck[index];

deck[index]=temp;

}

for(int i=0;i<4;i++){

String suit=suits[deck[i]/13];

String rank=ranks[deck[i]%13];

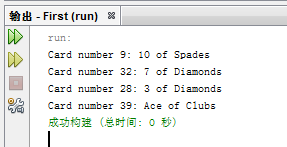
System.out.println("Card number "+deck[i]+": "+rank+" of "+suit);

}

}

}

运行结果：



<2>编写题目要求的代码

源代码：

package first;

import java.util.\*;

public class First{

public static void main(String args[]){

Scanner ss=new Scanner(System.in);

int number=0;

boolean cc=true;

int[] grade=new int[1000];

System.out.println("please input the grade of students and end with a negative number(max grade is 100)");

int i=0;

while(cc){

grade[i]=ss.nextInt();

number++;

if(grade[i]>100){

i=0;

System.out.println("input error,goodbye");

return;

}

if(grade[i]<0){

cc=false;

number--;

}

i++;

}

int average,sum=0;

for(i=0;i<number;i++){

sum+=grade[i];

}

average=sum/number;

int bigger=0,smaller=0;

for(i=0;i<number;i++){

if(grade[i]>=average){

bigger++;

}

if(grade[i]<average){

smaller++;

}

}

System.out.println("The average grade is "+average);

System.out.println("The number of grade bigger than average(include same grade) are "+bigger);

System.out.println("The number of grade smaller than average are "+smaller);

}

}

运行结果：

