Java语言程序设计实验报告

1. 实验内容

<1>实验清单12-7和12-8运行

<2>编写题目12.3要求的代码

1. 实验过程

<1>源代码：

package testcircle;

public class TestCircle{

public static void main(String args[]){

try{

CircleWE c1=new CircleWE(5);

CircleWE c2=new CircleWE(-5);

CircleWE c3=new CircleWE(0);

}

catch(IllegalArgumentException ex){

System.out.println(ex);

}

System.out.println("Number of objects created: "+CircleWE.getNumberOfObjects());

}

}

class CircleWE{

private double radius;

private static int numberOfObjects=0;

public CircleWE(){

this(1.0);

}

public CircleWE(double newRadius){

setRadius(newRadius);

numberOfObjects++;

}

public double getRadius(){

return radius;

}

public void setRadius(double newRadius)

throws IllegalArgumentException{

if(newRadius>=0)

radius=newRadius;

else

throw new IllegalArgumentException("Radius cannot be negative");

}

public static int getNumberOfObjects(){

return numberOfObjects;

}

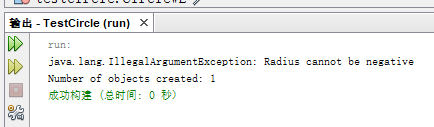
public double findArea(){

return radius\*radius\*3.14159;

}

}

运行结果：



<2>源代码：

package arraytest;

import java.util.\*;

import java.lang.\*;

public class ArrayTest{

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

Scanner ss=new Scanner(System.in);

try{

int[] mu=new int[100];

for(int i=0;i<100;i++){

mu[i]=(int)(Math.random()\*100);

}

System.out.println("请输入数组的下标（0~99）");

int key=ss.nextInt();

if(key<0||key>99){

throw new ArrayIndexOutOfBoundsException("Out of Bounds");

}

System.out.println(mu[key]);

}

catch(ArrayIndexOutOfBoundsException ax){

System.out.println(ax);

}

}

}

运行结果：

