# Pract 2

Задание 1

Author.java

package pac;  
  
public class Author  
{  
 private String name;  
 private String email;  
 private char gender;  
  
 Author(String name, String email, char gender) {  
 this.name = name;  
 this.email = email;  
 this.gender = gender;  
 }  
  
  
 public String getName() {  
 return name;  
 }  
  
 public void setName(String name) {  
 this.name = name;  
 }  
  
 public String getEmail() {  
 return email;  
 }  
  
 public void setEmail(String email) {  
 this.email = email;  
 }  
  
 public char getGender() {  
 return gender;  
 }  
  
 @Override  
 public String toString()  
 {  
 return this.name+" " + this.email+" "+" " +this.gender;  
 }  
}

Задание 2

Ball.java

package practice.prac2.task2;  
  
public class Ball {  
 private double x = 0.0;  
 private double y = 0.0;  
 public Ball(){}  
 public Ball(double x, double y){  
 this.x = x;  
 this.y = y;  
 }  
 public double getX() {  
 return x;  
 }  
 public double getY() {  
 return y;  
 }  
 public void setX(double x) {  
 this.x = x;  
 }  
 public void setY(double y) {  
 this.y = y;  
 }  
 public void setXY(double x, double y){  
 this.x = x;  
 this.y = y;  
 }  
 public void move( double xDisp, double yDisp){  
 x+=xDisp;  
 y+=yDisp;  
 }  
 public String toString() {  
 return "Ball @ ("+this.x+", "+this.y+").";  
 }  
}

TestBall

package practice.prac2.task2;  
  
public class TestBall {  
 public static void main(String[] args) {  
 Ball b1 = new Ball(100, 100);  
 System.*out*.println(b1);  
 b1.move(30, 15);  
 System.*out*.println(b1);  
 }  
}

Задание 3

Класс Circle.jave

package pac;  
  
public class Circle  
{  
 int x =0, y=0, r=0;  
  
 Circle(int \_x, int \_y, int \_r)  
 {  
 x=\_x;  
 y=\_y;  
 r=\_r;  
 }  
 public void set\_cord(int \_x, int \_y)  
 {  
 x=\_x;  
 y=\_y;  
 }  
 @Override  
 public String toString()  
 {  
 return "Кординаты (" + this.x + ";" + this.y +") радиус:"+" " +this.r;  
 }  
  
}

Класс Point

package pac;  
  
public class Point  
{  
 private int x = 0, y = 0;  
 Point(int x, int y)  
 {  
 this.x=x;  
 this.y=y;  
 }  
 public void set\_cord(int \_x, int \_y)  
 {  
 x=\_x;  
 y=\_y;  
 }  
 public void navigation(int \_x, int \_y)  
 {  
 x+=\_x;  
 y+=\_y;  
 }  
 public String get\_cord()  
 {  
 return x + " " + y;  
 }  
}

Класс Tester.java

package pac;  
import java.util.Scanner;  
public class Tester  
{  
 public static void main(String[] args)  
 {  
 int x, y, r;  
 Scanner in = new Scanner(System.*in*);  
 System.*out*.println("Введите количество обьектов Circle");  
 int n = in.nextInt();  
 Circle mass []= new Circle[n];  
 int i = 0;  
 while (n!=i)  
 {  
 System.*out*.println("Введите х");  
 x = in.nextInt();  
 System.*out*.println("Введите у");  
 y = in.nextInt();  
 System.*out*.println("Введите r");  
 r= in.nextInt();  
 Circle obj = new Circle(x,y,r);  
 mass[i]=obj;  
 i++;  
 }  
 for(int g = 0; g<n; g++)  
 {  
 System.*out*.println(mass[g]);  
 }  
 }  
}

Задание 6

Файл Circle.java

package pac;  
  
public class Circle  
{  
 int x =0, y=0, r=0;  
 double S=0, length = 0;  
  
 Circle(int \_x, int \_y, int \_r)  
 {  
 x=\_x;  
 y=\_y;  
 r=\_r;  
 }  
 public void set\_cord(int \_x, int \_y)  
 {  
 x=\_x;  
 y=\_y;  
 }  
 public void set\_r(int \_r)  
 {  
 r=\_r;  
 }  
 public void Squr()  
 {  
 S = r\* r \* Math.*PI*;  
 }  
 public void length\_circ()  
 {  
 length = Math.*PI* \* 2 \* r;  
 }  
 public double get\_Squr()  
 {  
 return S = r \* r \* Math.*PI*;  
 }  
 public double get\_length\_circ()  
 {  
 return length = Math.*PI* \* 2 \* r;  
 }  
 public void srav (Circle second)  
 {  
 if (this.S > second.S)  
 {  
 System.*out*.println("Первая окружность больше");  
 }  
 else  
 {  
 System.*out*.println("Вторая окружность больше");  
 }  
 }  
 @Override  
 public String toString()  
 {  
 return "Кординаты (" + this.x + ";" + this.y +") радиус:"+" " +this.r + " S=" + this.S + " length =" + this.length;  
 }  
  
}

Файл CircleTest.java

package pac;  
import java.util.Scanner;  
public class CircleTest  
{  
 public static void main(String[] args)  
 {  
 int x, y, r;  
 Scanner in = new Scanner(System.*in*);  
 System.*out*.println("Введите количество обьектов Circle");  
 int n = in.nextInt();  
 Circle mass []= new Circle[n];  
 int i = 0;  
 while (n!=i)  
 {  
 System.*out*.println("Введите х");  
 x = in.nextInt();  
 System.*out*.println("Введите у");  
 y = in.nextInt();  
 System.*out*.println("Введите r");  
 r= in.nextInt();  
 Circle obj = new Circle(x,y,r);  
 mass[i]=obj;  
 mass[i].Squr();  
 mass[i].length\_circ();  
 i++;  
 }  
 for(int g = 0; g<n; g++)  
 {  
 System.*out*.println(mass[g]);  
 }  
 mass[0].srav(mass[1]);  
 }  
}

Задание 10

package ad;  
import java.util.Scanner;  
import java.util.StringTokenizer;  
  
public class HowMany  
{  
 public static void main(String[] args)  
 {  
 String str;  
 Scanner in = new Scanner(System.*in*);  
 str= in.nextLine();  
 StringTokenizer st = new StringTokenizer(str);  
 int i = 0;  
 while (st.hasMoreTokens())  
 {  
 i++;  
 st.nextToken();  
 }  
 System.*out*.println("Всего элементов " + i);  
 }  
}