

## OOP Assignment - 1

①

11 package PKg01.temperature;

class Celsius {

    public double celsius;

    Celsius (double c) {

        celsius = c;

    }

    public double display\_fahrenheit () {

        return (9/5 \* celsius) + 32;

    }

}

class Fahrenheit {

    private double fahrenheit;

    Fahrenheit (double fahrenheit) {

        this.fahrenheit = fahrenheit;

    }

    public double display\_celsius () {

        return (fahrenheit - 32) \* 5/9;

    }

}

public class Temperature {

    public static void main (String [] args) {

        Celsius c = new Celsius (20);

② System.out.println(c.display\_fahrenheit() + "F");

Fahrenheit f = new Fahrenheit(50);

System.out.println(f.display\_celsius() + "C");

}

}

- o -

2) package pk02.cars\_parking;

class CarPark{

private int carid, charge;

private float parkedtime;

public void setCarid(int carid){

this.carid = carid;

public int getCarid(){

return carid;

}

public void setCharge(int charge){

this.charge = charge;

}

public int getCharge(){

return charge;

}

```
public void setParked_time(float parktime){ ③  
    this.parktime = parktime; ④ from
```

{

```
public float getParked_time(){ ⑤ to ⑥
```

```
return parktime; ⑦ for basic storing
```

}

```
void display(){ ⑧ (C) base class did not
```

```
System.out.println(getCarid()); ⑨
```

```
System.out.println(getCharge()+"%"); ⑩
```

```
System.out.println(getParked_time()); ⑪
```

}

```
}
```

```
public class CarParking{ ⑫ monitor
```

```
public static void main(String[] args){ ⑬
```

```
Carpark c = new Carpark(); ⑭
```

```
c.setCarid(29); ⑮ series kollegib bis
```

```
c.setCharge(80); ⑯ naming, buo. notes
```

```
c.setParked_time(7.3f); ⑰ caro. notes
```

```
c.display(); ⑱ el. prototyp 880
```

}

```
}
```

⑨ 3/ package pkg03.area\_perimeter;

```
import java.util.Scanner;
```

class Circle{

```
private int r;
```

public void read(){

```
Scanner input = new Scanner(System.in);
```

```
System.out.print("Enter the radius: ");
```

```
r = input.nextInt();
```

}

public double area(){

```
return 3.1416 * r * r;
```

}

public double circumference(){

```
return 2 * 3.1416 * r;
```

}

void display\_circle(){

```
System.out.println(area());
```

```
System.out.println(circumference());
```

}

}

class Rectangle{

```
private int w,h;
```

public void read(){

```
Scanner input = new Scanner(System.in);
```

```
System.out.print("Enter width: ");
```

w = input.nextInt();  
System.out.print("Enter height:");

h = input.nextInt();

} public double area(){  
return w\*h;

} public double p(){  
return 2\*(w+h);

} void display\_rectangle(){  
System.out.println(area());  
System.out.println(p());

}

class Triangle{  
private int a,b,h;  
public void read(){  
Scanner input = new Scanner(System.in);  
System.out.print("A is : " + a);  
a = input.nextInt();  
System.out.print("B is : " + b);  
b = input.nextInt();  
System.out.print("C is : " + h);  
h = input.nextInt();  
}

```
public double area(){  
    } return 0.5*b*h;  
public double perimeter(){  
    return a+b+h;  
}  
void display_triangle(){  
    System.out.println(area());  
    System.out.println(perimeter());  
}  
}  
public class Area_Perimeter {  
    public static void main(String[] args){  
        Circle c = new Circle();  
        c.read();  
        c.display_circle();  
        Rectangle r = new Rectangle();  
        r.read();  
        r.display_rectangle();  
        Triangle t = new Triangle();  
        t.read();  
        t.display_triangle();  
    }  
}
```

41 package pkg04.complex; (7)

class Complex {

    public double a;

    public double b;

    Complex (double a, double b) {

        this.a = a;

        this.b = b;

    }

    Complex add (Complex c) {

        return new Complex (a+c.a, b+c.b);

    }

    Complex sub (Complex c) {

        return new Complex (a-c.a, b-c.b);

    }

    Complex mult (Complex c) {

        double x = a\*c.b - b\*c.b;

        double y = a\*c.b + b\*c.a;

        return new Complex (x,y);

    }

    void display () {

        System.out.println ("a+" + "a" + "b");

    }

}

public class ComplexDisplay {

    public static void main (String [] args) {

        Complex c1 = new Complex (7,2);

        Complex c2 = new Complex (4,5);

⑧

Complex sum = c1.add(c2);  
Complex diff = c1.sub(c2);  
Complex mul = c1.mult(c2);  
sum.display();  
diff.display();  
mul.display();  
}  
}  

---

51

```
package pkg05.Override;  
class Animal{  
    public void sound(){  
        System.out.println("Animal Sound");  
    }  
}  
class Dog extends Animal{  
    @Override  
    public void sound(){  
        System.out.println("Dog Sound: bow bow");  
    }  
}  
public class Overridden{  
    public static void main(String[] args){  
        Animal a = new Animal();  
        a.sound();  
        a = new Dog();  
        a.sound();  
    }  
}
```