

Task No: 05



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Object Oriented Programming

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Problem # 1: [CLO2]

Source Code:

```
import java.util.Scanner;

public class LabTask5A {
    public static void main(String args[]) {
        Scanner input = new Scanner(System.in);

        Calculation cal = new Calculation();

        System.out.println("Enter the value of number1, number2");
        cal.setNumber1(input.nextInt());
        cal.setNumber2(input.nextInt());

        System.out.println("The addition of number1 + number2 is: " + cal.addition());
        System.out.println("The subtraction of number1 - number2 is: " + cal.subtraction());

    }
}

class Calculator {
    public int addition() {
        return 0;
    }

    public int subtraction() {
```

```
        return 0;
    }
}
```

```
class Calculation extends Calculator {
    private int number1;
    private int number2;

    Calculation(int number1, int number2) {
        this.number1 = number1;
        this.number2 = number2;
    }
}
```

```
Calculation() {
    number1 = 0;
    number2 = 0;
}
```

```
public void setNumber1(int number1) {
    this.number1 = number1;
}
```

```
public int getNumber1() {
    return number1;
}
```

```
public void setNumber2(int number2) {
    this.number2 = number2;
}
```

```
public int getNumber2() {  
    return number2;  
}
```

```
@Override
```

```
public int addition() {  
    return number1 + number2;  
}
```

```
@Override
```

```
public int subtraction() {  
    return number1 - number2;  
}  
}
```

OUTPUT:

```
d:\Code Playground\Java>cd "d:\Code Playground\Java\" && javac LabTask5A.java && java LabTask5A  
Enter the value of number1, number2  
45  
10  
The addition of number1 + number2 is: 55  
The subtraction of number1 - number2 is: 35  
  
d:\Code Playground\Java>|
```

Problem # 2: [CLO2]

Source Code:

```
import java.util.Scanner;

public class LabTask5B {
    public static void main(String args[]) {
        Scanner input = new Scanner(System.in);

        Rectangle rectangle = new Rectangle();

        System.out.println("Enter the value of number1, number2");
        rectangle.setLength(input.nextDouble());
        rectangle.setWidth(input.nextDouble());

        System.out.println("The area of the rectangle is: " + rectangle.getArea());
    }
}

class Shape {
    public double getArea() {
        return 0;
    }
}

class Rectangle extends Shape{
    private double length, width;
    public void setLength(double length) {
        this.length = length;
    }
}
```

```

public double getLength() {
    return length;
}

public void setWidth(double width) {
    this.width = width;
}

public double getWidth() {
    return width;
}

@Override

public double getArea() {
    return length * width;
}

```

OUTPUT:

```

Microsoft Windows [Version 10.0.22631.3527]
(c) Microsoft Corporation. All rights reserved.

D:\Code Playground\Java>cd "d:\Code Playground\Java\" && javac LabTask5B.java && java LabTask5B
Enter the value of Length, width
23.1
43.2
The area of the rectangle is: 997.9200000000001

d:\Code Playground\Java>|

```

The End