Java Lab File

Lab 6:-

Program 19: **Creating and Using a Simple Package-** Create a package named mypackage and a class Greeting inside it. The Greeting class should have a method sayHello() that prints "Hello, World!". Write a program to use this package and call the sayHello() method.

Software Used:- VS Code

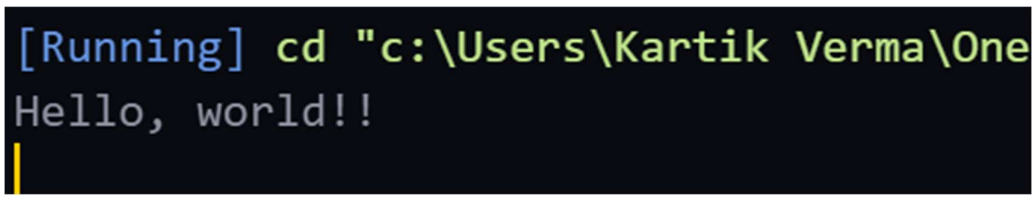
Code:-

```
package mypackage;
public class Greeting {
   public void sayHello(){
      System.out.println("Hello, world!!");
}

import mypackage.*;
public class pack {
   public static void main(String[] args) {
      //calling the package function:-
      Greeting obj=new Greeting();
      obj.sayHello();
   }

}
```

Output:-



Java Lab File

Lab 6:-

Program 20: **Using Multiple Classes in a Package-** Create a package named mathoperations. Inside this package, create two classes: Addition and Subtraction. The Addition class should have a method add(int a, int b) that returns the sum of two numbers. The Subtraction class should have a method subtract(int a, int b) that returns the difference of two numbers. Write a program

to use these classes and perform addition and subtraction.

Software Used:- VS Code

Code:-

```
package mathoperations;
public class Addition {
    public int add(int a, int b) {
        return a + b;
    }
}
public class Subtraction {
    public int subtract(int a, int b) {
        return a - b;
    }
}
import mathoperations.Addition;
import mathoperations.Subtraction;
```

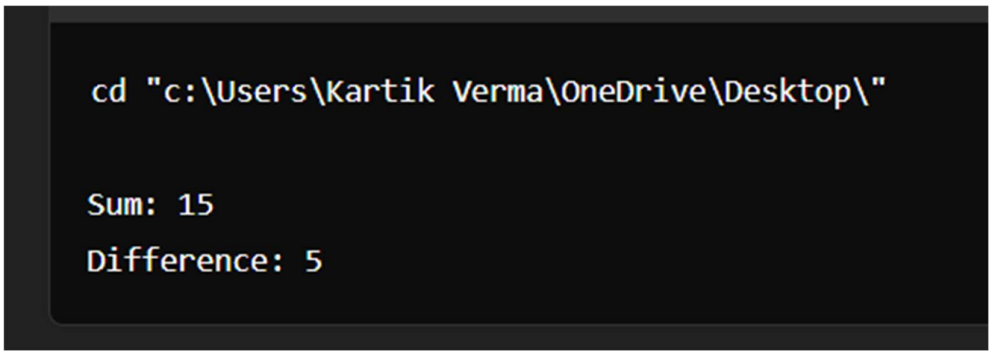
```
public class Main {
    public static void main(String[] args) {
        Addition addition = new Addition();
        Subtraction subtraction = new Subtraction();

        int a = 10;
        int b = 5;

        int sum = addition.add(a, b);
        int difference = subtraction.subtract(a, b);

        System.out.println("Sum: " + sum);
        System.out.println("Difference: " + difference);
    }
}
```

Output:-



Java Lab File

Lab 6:-

Program 21: **Access Modifiers in Packages-** Create a package named shapes. Inside this package, create a class Circle with a method area(double radius) that calculates the area of a circle. Ensure the method is public so it can be accessed from outside the package. Write another class TestCircle in a different package to create an object of Circle and call the area method.

Software Used:- VS Code

Code:-

```
package shapes;

public class Circle {

   public double area(double radius) {

      return Math.PI * radius * radius;

   }}

package test;

import shapes.Circle;

public class TestCircle {

   public static void main(String[] args) {

      Circle circle = new Circle();

      double radius = 5.0;

      double circleArea = circle.area(radius);

      System.out.println("Area of the circle with radius " + radius + ": " +
circleArea);

   }

}
```

Output

```
cd "c:\Users\Kartik Verma\OneDrive\Desktop\"

Area of the circle with radius 5.0: 78.53981633974483
```