JAVA PROGRAMMING LAB LAB - 1

BASIC PROGRAMS

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CSE1007 LAB (L9+L10)

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TASK 1

Write a Java Program to print hello world sting on the console.

CODE

```
class HelloWorld_20BRS1065
{
   public static void main(String args[])
   {
      System.out.println("Hello World");
   }
}
```

OUTPUT

```
C:\Users\Eesha>javac HelloWorld_20BRS1065.java
C:\Users\Eesha>java HelloWorld_20BRS1065
Hello World
C:\Users\Eesha>_
```

TASK 2

Write a Java program to prompt the user to enter his / her first name and last name and then print a message 'Welcome' followed by the user's first and last name.

CODE

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;

class UserInput
{
   public static void main(String args[]) throws IOException
     {
     BufferedReader reader= new BufferedReader(new
InputStreamReader(System.in));

   System.out.println("Enter Your First Name: ");
   String First_str= reader.readLine();

   System.out.println("Enter Your Last Name: ");
   String Last_str= reader.readLine();

   System.out.println("Welcome "+First_str+" "+Last_str);
}
```

}

OUTPUT

```
C:\Users\Eesha>javac UserInput_20BRS1065.java
C:\Users\Eesha>java UserInput_20BRS1065
Enter Your First Name:
Rishabh
Enter Your Last Name:
Jain
Welcome Rishabh Jain
```

TASK 3

Write a Java program to prompt the user to enter two binary numbers and display the sum of those two binary numbers on the console.

CODE

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;

class Sum_20BRS1065
{
    public static void main(String args[]) throws IOException
      {
        BufferedReader reader= new BufferedReader(new
InputStreamReader(System.in));

        System.out.println("Enter The First Number: ");
        String First_num= reader.readLine();
        int num_1= Integer.parseInt(First_num, 2);
```

```
System.out.println("Enter The Second Number: ");
String Second_num= reader.readLine();
int num_2= Integer.parseInt(Second_num, 2);

System.out.println("The Sum Of The Two Binary Numbers is : "+
Integer.toBinaryString(num_1+num_2));
}
```

OUTPUT

```
eC:\Users\Eesha>javac Sum_20BRS1065.java
C:\Users\Eesha>java Sum_20BRS1065
Enter The First Number:
1010
Enter The Second Number:
1010
The Sum Of The Two Binary Numbers is : 10100
```

TASK 4

Write a Java program to prompt the user to enter the area of a circle and display the radius and perimeter of the circle

CODE

```
import java.util.*;

class Area_20BRS1065
{
   public static void main(String args[])
    {
      Scanner in = new Scanner(System.in);

      System.out.println("Enter The Area: ");
      double area= in.nextDouble();
```

```
double radius = Math.sqrt(area/Math.PI);
   System.out.println("Radius = "+ radius);
   System.out.println("Perimeter = "+2*Math.PI*radius);
}
```

OUTPUT

```
C:\Users\Eesha>javac Area_20BRS1065.java
C:\Users\Eesha>java Area_20BRS1065
Enter The Area:
30.2
Radius = 3.1004771508189637
Perimeter = 19.48087247927174
```

TASK 5

Write a Java Program to read an integer and perform the following actions:

- 1. If input number is odd, print You are odd
- 2. If input number is even and in the inclusive range 2 of to 10 , print You are an even in the range 2-10
- 3. If input number is even and in the inclusive range of 10 to 20, print You are an even in the range 10-20
- 4. If is even and greater than 20, print You are an even who is greater than 20

<u>CODE</u>

```
import java.util.*;
class Int_20BRS1065
{
   public static void main(String args[])
   {
     Scanner in = new Scanner(System.in);
```

```
System.out.println("Enter A Number: ");
int num= in.nextInt();

if (num % 2==0)
    {
    if ((num>=2) && (num<10))
        {
        System.out.println("You are an even in the range 2-10");
        }
        else if ((num>=10) && (num<20))
        {
            System.out.println("You are an even in the range 10-20");
        }
        else
            {
            System.out.println("You are an even who is greater than 20");
            }
        else
            System.out.println("You are Odd");
        }
}</pre>
```

<u>OUTPUT</u>

```
C:\Users\Eesha>javac Int_20BRS1065.java
C:\Users\Eesha>java Int_20BRS1065
Enter A Number:
14
You are an even in the range 10-20
```

TASK 6

Write a java program to read an integer, a double, and a String from stdin (System.in), then print the values.

CODE

```
import java.util.*;

class Input_20BRS1065
{
   public static void main(String args[])
   {
      Scanner in = new Scanner(System.in);

      System.out.println("Enter Number: ");
      int num1 = in.nextInt();

      System.out.println("Enter Double: ");
      double num2 = in.nextDouble();

      System.out.println("Enter String: ");
      String num3 = in.next();

      System.out.println("Output:\n" + num1 + "\n" +num2 + "\n" + num3);
    }
}
```

OUTPUT

```
C:\Users\Eesha>java Input_20BRS1065
Enter Number:
6
Enter Double:
4.5
Enter String:
Hi
Output:
6
4.5
```

TASK 7

Write a Java Program for reading an integer and printing first 10 multiples of the input integer

CODE

```
import java.util.*;

class Multiples_20BRS1065
{
   public static void main(String args[])
   {
     Scanner in = new Scanner(System.in);

     System.out.println("Enter Number: ");
     int num = in.nextInt();

     System.out.println("Multiples: ");
     for (int i=1; i<=10; i++)
        {
          System.out.println(i*num+" ");
        }
     }
}</pre>
```

OUTPUT

```
C:\Users\Eesha>javac Multiples_20BRS1065.java
C:\Users\Eesha>java Multiples_20BRS1065
Enter Number:
6
Multiples:
6
12
18
24
30
36
42
48
54
60
```