

20BRS1193 Meher Shrishti Nigam

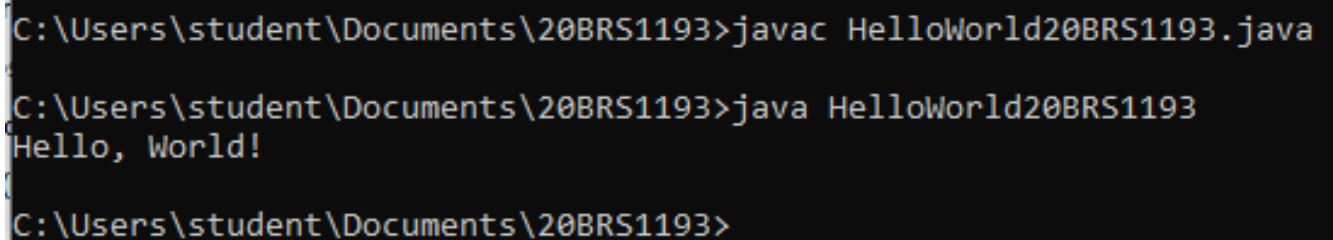
LAB 1 JAVA PROGRAMMING L9 L10

Q1) Write a Java Program to print hello world sting on the console.

Code:

```
public class HelloWorld20BRS1193{  
    public static void main(String args[]){  
        System.out.println("Hello, World!");  
    }  
}
```

Output:



```
C:\Users\student\Documents\20BRS1193>javac HelloWorld20BRS1193.java  
C:\Users\student\Documents\20BRS1193>java HelloWorld20BRS1193  
Hello, World!  
C:\Users\student\Documents\20BRS1193>
```

Q2) 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.util.Scanner;  
  
public class Welcome20BRS1193{  
    public static void main(String args[]){
```

```

Scanner scannerObj = new Scanner(System.in);

System.out.print("Enter first name: ");

String firstName = scannerObj.nextLine();

System.out.print("Enter last name: ");

String lastName = scannerObj.nextLine();

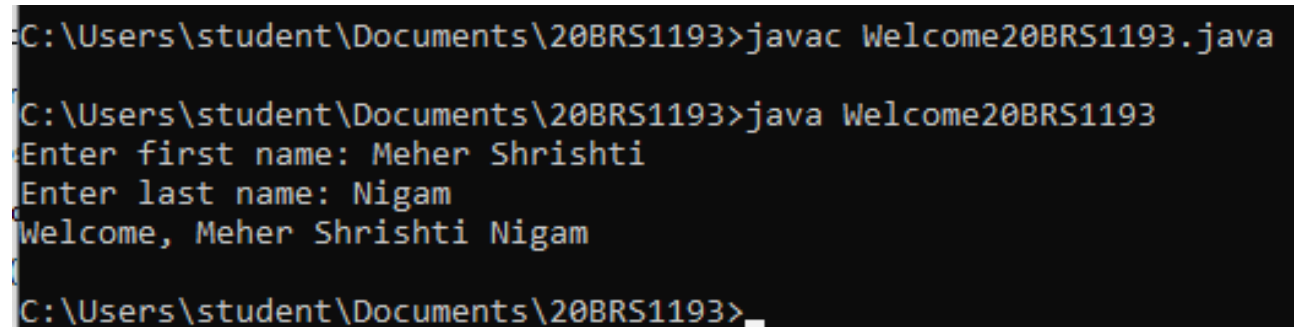
System.out.println("Welcome, " + firstName + " " + lastName);

}

}

```

Output:



```

C:\Users\student\Documents\20BRS1193>javac Welcome20BRS1193.java

C:\Users\student\Documents\20BRS1193>java Welcome20BRS1193
Enter first name: Meher Shrishti
Enter last name: Nigam
Welcome, Meher Shrishti Nigam

C:\Users\student\Documents\20BRS1193>

```

Q3) Write a Java program to prompt the user to enter two binary numbers and display the sum of those two binary numbers on console.

Code:

```

import java.util.Scanner;

public class BinarySum20BRS1193{

    public static void main(String args[]){

        Scanner scannerObj = new Scanner(System.in);

        System.out.println("Enter binary number: ");

        String binStr1 = scannerObj.next();
    }
}

```

```

System.out.println("Enter binary number: ");

String binStr2 = scannerObj.next();

int bin1 = Integer.parseInt(binStr1, 2);

int bin2 = Integer.parseInt(binStr2, 2);

int sum = bin1 + bin2;

System.out.println("Sum in integer: " + sum);

System.out.println("Sum in binary: " +
Integer.toBinaryString(sum));

}

}

```

Output:

```

C:\Users\student\Documents\20BRS1193>javac BinarySum20BRS1193.java

C:\Users\student\Documents\20BRS1193>java BinarySum20BRS1193
Enter binary number:
1010
Enter binary number:
1000
Sum in integer: 18
Sum in binary: 10010

C:\Users\student\Documents\20BRS1193>java BinarySum20BRS1193
Enter binary number:
10000
Enter binary number:
11010
Sum in integer: 42
Sum in binary: 101010

C:\Users\student\Documents\20BRS1193>

```

Q4) 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.Scanner;

public class Circle20BRS1193{

    public static void main(String args[]){

        final float PI = 3.14F;

        // Input

        Scanner scannerObj = new Scanner(System.in);

        System.out.println("Enter the area of the circle: ");

        float areaOfCircle = scannerObj.nextFloat();

        // Calculation

        float radius = (float) Math.sqrt((areaOfCircle / PI));

        float perimeter = radius * PI * 2;

        System.out.println("Perimeter of the circle is: " + perimeter);

    }

}
```

Output:

```
C:\Users\student\Documents\20BRS1193>javac Circle20BRS1193.java
C:\Users\student\Documents\20BRS1193>java Circle20BRS1193
Enter the area of the circle:
3.14
Perimeter of the circle is: 6.28

C:\Users\student\Documents\20BRS1193>java Circle20BRS1193
Enter the area of the circle:
345.343
Perimeter of the circle is: 65.859764
C:\Users\student\Documents\20BRS1193>_
```

Q5) Write a Java Program to read an integer and perform the following actions: • If input number is odd, print You are odd • If input number is even and in the inclusive range 2 of to 10 , print You are an even in the range 2-10 • If input number is even and in the inclusive range of 10 to 20, print You are an even in the range 10-20 • If is even and greater than 20, print You are an even who is greater than 20

Code:

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

```
public class IfElse20BRS1193{
```

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

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

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

```
        int inputNumber = scannerObj.nextInt();
```

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

PTO

Output:

```
C:\Users\student\Documents\20BRS1193>
C:\Users\student\Documents\20BRS1193>javac IfElse20BRS1193.java

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 5
You are odd.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 2
You are even in the range 2-10.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 12
You are even in the range 2-10.

C:\Users\student\Documents\20BRS1193>javac IfElse20BRS1193.java

C:\Users\student\Documents\20BRS1193>java HelloWorld20BRS1193
Hello, World!

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 5
You are odd.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 2
You are even in the range 2-10.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 12
You are even in the range 10-20.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 40
You are an even who is greater than 20.

C:\Users\student\Documents\20BRS1193>java IfElse20BRS1193
Enter number: 0

C:\Users\student\Documents\20BRS1193>_
```

Q6) 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.Scanner;

public class Input20BRS1193{

    public static void main(String args[]){

        Scanner scannerObj = new Scanner(System.in);

        System.out.println("Enter an integer: ");

        int x = scannerObj.nextInt();

        System.out.println("Enter a double: ");

        double y = scannerObj.nextDouble();

        System.out.println("Enter a string: ");

        String str = scannerObj.next();

        System.out.println("Integer: " + x);

        System.out.println("Double: " + y);

        System.out.println("String: " + str);

    }

}
```


Output:

```
C:\Users\student\Documents\20BRS1193>javac Input20BRS1193.java
C:\Users\student\Documents\20BRS1193>java Input20BRS1193
Enter an integer:
12
Enter a double:
123.355
Enter a string:
Hello!
Integer: 12
Double: 123.355
String: Hello!
```

Q7) Write a Java Program for reading an integer and printing first 10 multiples of the input integer.

Code:

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

```
public class Multiples20BRS1193{
```

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

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

```
        System.out.println("Enter number: ");
```

```
        int x = scannerObj.nextInt();
```

```
        for(int i = 1; i <= 10; i++){
```

```
            int m = x * i;
```

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

```
        }
```

```
}  
  
}
```

Output

```
C:\Users\student\Documents\20BRS1193>javac Multiples20BRS1193.java  
C:\Users\student\Documents\20BRS1193>java Multiples20BRS1193  
Enter number:  
5  
5  
10  
15  
20  
25  
30  
35  
40  
45  
50  
  
C:\Users\student\Documents\20BRS1193>java Multiples20BRS1193  
Enter number:  
45  
45  
90  
135  
180  
225  
270  
315  
360  
405  
450
```