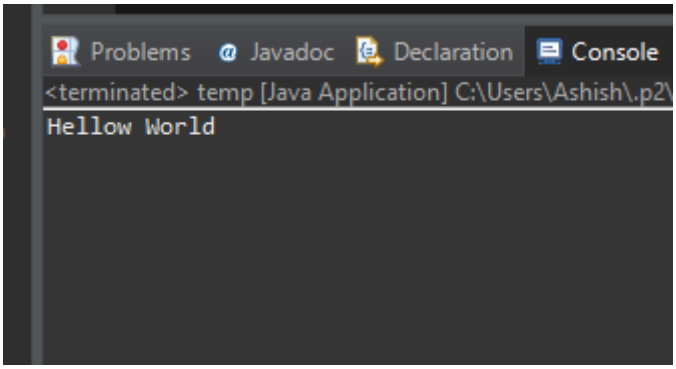
Lab 1

1.Write a Java program to print "Hello, World!" to the console.
Code :

```
package hellow;
public class HellowWorld
{
  public static void main(String args[])
  {
    System.out.println("Hellow World");
  }


}
```

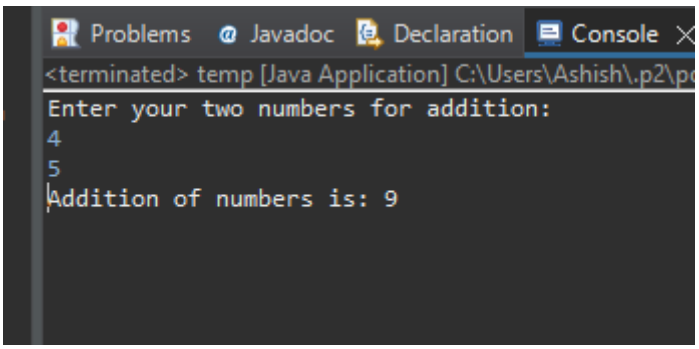
Output :



2.Write a program to find the sum of two numbers entered by the user.
Code :

```
package hellow;
import java.util.Scanner;
class Add {
  public int add(int c, int d) {              //creating class for adition
    return c + d;
  }
}
public class TwoNumberAdd {
  public static void main(String[] args) {
    Add addition = new Add();     // creating object of class add
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter your two numbers for addition:");
    int c = sc.nextInt();
    int d = sc.nextInt();
    System.out.println("Addition of numbers is: " + addition.add(c, d));
  }
}
```

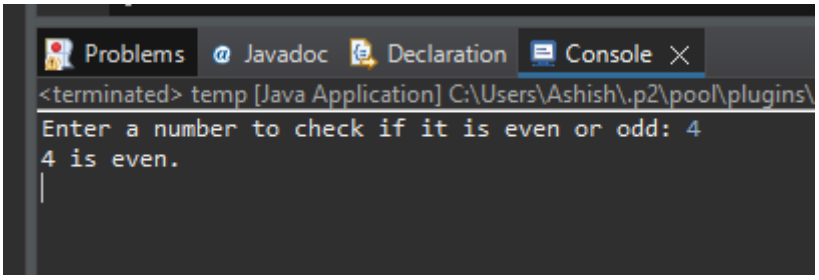
Output :



3.Write a Java program to check whether a given number is even or odd.
Code :

```
package hellow;
import java.util.Scanner;
public class EvenOdd{
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter a number to check if it is even or odd: ");
    int a = scanner.nextInt();
    if (a % 2 == 0) {                 // getting modulo for get even number
      System.out.println(a + " is even.");
    } else {
      System.out.println(a + " is odd.");
    }
  }
}
```

Output :

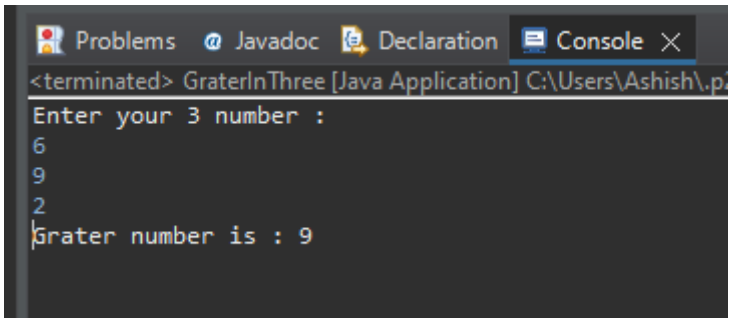


4.Write a java program to find greatest of 3 numbers.
Code :

```
package hellow;
import java.util.*;

public class GraterInThree {
  public static void main(String args[]) {
    Scanner sc = new Scanner(System.in);
    int arr [] = new int[3];        // using array for get 3 number

    System.out.println("Enter your 3 number : ");

    for(int i=0;i < arr.length;i++) {  //getting input on each index by loop
      arr [i] = sc.nextInt();
    }

    int grater = arr[0];            // starting with index of zero
    for(int i=0;i<arr.length;i++) {
      if (arr[i]> grater) {       // compareing each value by using for loop
        grater = arr[i];
      }
    }

    System.out.println("Grater number is : "+ grater);   //printing grater number
    sc.close();
```

```
  }

}
```

Output :

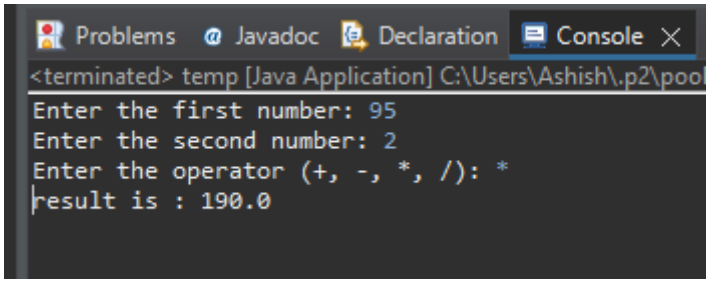


5.Write a program to implement a basic calculator that takes input and evaluates it.
Code :

```
package hellow;

import java.util.Scanner;

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

    System.out.print("Enter the first number: ");
    double num1 = scanner.nextDouble();

    System.out.print("Enter the second number: ");
    double num2 = scanner.nextDouble();

    System.out.print("Enter the operator (+, -, *, /): ");
    char operator = scanner.next().charAt(0);

    double result = 0;
//its basic calculater thats why using if condition insted of switch

    if (operator == '+') {
      result = num1 + num2;
    } else if (operator == '-') {
      result = num1 - num2;
    } else if (operator == '*') {
      result = num1 * num2;
    } else if (operator == '/') {
       result = num1 * num2;
    }
    System.out.println("result is : "+ result);
```

```
    scanner.close();
  }
}
```

Output :

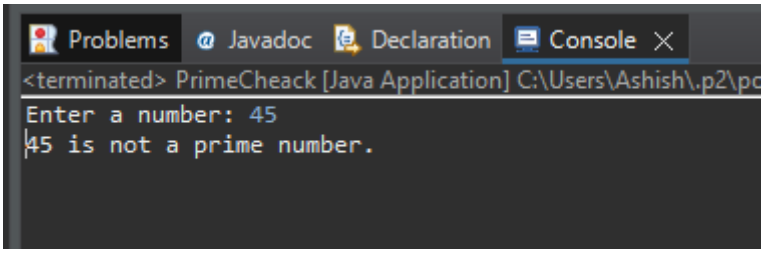


6.Write a Java program to check if a given number is prime or not.
Code :

```
package hellow;

import java.util.Scanner;

public class PrimeCheack {

  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter a number: ");
    int number = scanner.nextInt();

    if (isPrime(number)) {
      System.out.println(number + " is a prime number.");
    } else {
      System.out.println(number + " is not a prime number.");
    }
    scanner.close();
  }

  public static boolean isPrime(int num) {
    // Numbers less than or equal to 1 are not prime
    if (num <= 1) {
      return false;
    }
    // Checking for factors from 2 up to the square root of num
    for (int i = 2; i <= Math.sqrt(num); i++) {
      if (num % i == 0) {
        return false;
      }
    }

    return true;
  }
```

```
}
```

Output :

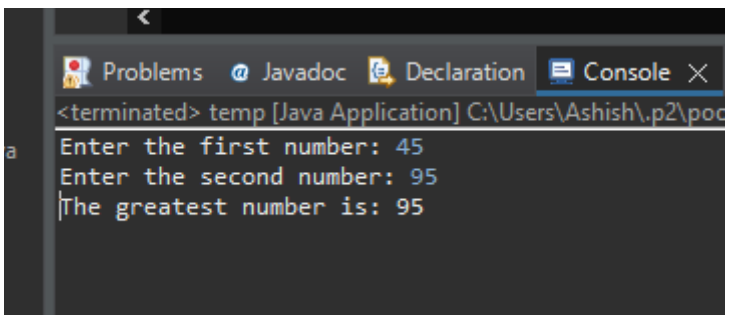


7.Create a Java program that compares two numbers and prints the larger one..

Code :

```
package hellow;
import java.util.Scanner;
class NumberComparer {
  public int findGreatest(int a, int b) {
    if (a > b) {
      return a;
    } else {
      return b;
    }
  }
}
public class temp {
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    NumberComparer comparer = new NumberComparer();

    System.out.print("Enter the first number: ");
    int number1 = scanner.nextInt();

    System.out.print("Enter the second number: ");
    int number2 = scanner.nextInt();

    int greatest = comparer.findGreatest(number1, number2);
    System.out.println("The greatest number is: " + greatest);
  }
}
```

Output :



8.Write a Java program that takes an age input from the user and determines if they are eligible to vote (considering the legal voting age).

Code:

```
package hellow;
import java.util.Scanner;
public class VoatingCheack {
  public static void main(String[] args) {

    Scanner sc = new Scanner(System.in);
    System.out.println("Enter your age: ");
    int age = sc.nextInt();

    if (age == 18) {
      System.out.println("make your voter id you can vote");
    }
    else if (age<18) {
      System.out.println("You are not eligible for voating");
    }else if (age>18) {
      System.out.println("You are eligible for voating");
    }else {
      System.out.println("inter valid value");
    }

    sc.close();
  }
}
```

output: