

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

Code:-

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

Output:-

```
Hello World
```

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

Code:-

```
package MyPackage;
import java.util.Scanner;
public class SumOfTwoNumbers
{
    Public static void main (String[] args)
    {
        //Takes two number in input
        Scanner sc=new Scanner (System.in);
        System.out.print("Enter first number: ");
        Int num1 = sc.nextInt();
        System.out.print("Enter second number: ");
        Int num2 = sc.nextInt();
        Int sum = num1 + num2;
        System.out.println(num1 + " + " + num2 + " = " + sum);
    }
}
```

Output:-

```
Enter first number: 10
Enter second number: 20
10 + 20 = 30
```

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

Code:-

```
package MyPackage;
import java.util.Scanner;
public class EvenOdd
{
    //Takes a number in input
    public static void main (String[] args)
    {
        Scanner sc=new Scanner (System.in);
        System.out.print("Enter a number: ");
        int num = sc.nextInt();
        //To check whether number is even or odd
        if (num % 2 == 0) {
            System.out.println(num + " is even number.");
        } else {
            System.out.println(num + " is odd number.");
        }
    }
}
```

Output:-

```
Enter a number: 13
13 is odd number.
```

4. Write a Java program to find greatest of 3 numbers.

Code:-

```
package MyPackage;
public class GreatestOfThreeNumber
{
    public static void main (String[] args)
    {
        int num1 = 83;
        int num2 = 52;
        int num3 = 95;
        //To check greatest number
        if (num1>num2 && num1>num3) {
            System.out.println(num1 + " is greatest number.");
        } else if (num2>num1 && num2>num3){
            System.out.println(num2 + " is greatest number.");
        } else {
            System.out.println(num3 + " is greatest number.");
        }
    }
}
```

Output:-

```
95 is greatest number.
```

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

Code:-

```
package MyPackage;
import java.util.Scanner;
public class Calculator
{
    Public static void main (String[] args)
    {
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter first number: ");
        Int num1=sc.nextInt();
        System.out.print("Enter second number: ");
        Int num2=sc.nextInt();

        Int add = num1 + num2; //addition
        Int sub = num1 - num2; //subtraction
        Int mul = num1 * num2; //multiplication
        Int div = num1 / num2; //division

        System.out.println(num1 + " + " + num2 + " = " + add);
        System.out.println(num1 + " - " + num2 + " = " + sub);
        System.out.println(num1 + " * " + num2 + " = " + mul);
        System.out.println(num1 + " / " + num2 + " = " + div);
    }
}
```

Output:-

```
Enter first number: 20
Enter second number: 10
20 + 10 = 30
20 - 10 = 10
20 * 10 = 200
20 / 10 = 2
```

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

Code:-

```
package MyPackage;
import java.util.Scanner;
public class PrimeNumber
{
    public static void main (String[] args)
    { //takes number as input
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter a number: ");
        int num=sc.nextInt();
        int count=0;

        if (num == 0 || num == 1) {
            System.out.println(num + " is not a prime number.");
        } else {
            //checks how many times remainder is 0 and increase the count
            for (int i=1; i<num; i++){
                if (num % i == 0) {
                    count++;
                }
            }
            if (count < 2) {
                //if count is less than 2 or equal to 1 means number is divisible
                //by only with 1 and the number is prime number
                System.out.println(num + " is a prime number.");
            } else {
                //if count is greater than 1 means number is divisible by many
                //numbers and number is not prime number
                System.out.println(num + " is not a prime number.");
            }
        }
    }
}
```

Output:-

```
Enter a number: 37
37 is a prime number.
```

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

Code:-

```
package MyPackage;
public class LargestOfTwoNumber
{
    Public static void main (String[] args)
    {
        Int num1 = 55;
        Int num2 = 42;
        //To compare both numbers
        If (num1>num2) {
            System.out.println(num1 + " is largest number.");
        } else {
            System.out.println(num2 + " is largest number.");
        }
    }
}
```

Output:-

```
55 is largest number.
```

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 MyPackage;
import java.util.Scanner;
public class Voting
{
    Public static void main (String[] args)
    {
        //Takes age as input
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter your age: ");
        Int age=sc.nextInt();
        //To check eligibility
        If (age>=18) {
            System.out.println("You are eligible for voting.");
        } else {
            System.out.println("You are not eligible for voting.");
        }
    }
}
```

Output:-

```
Enter your age: 21
You are eligible for voting.
```