Reg No: 23MCA1030 **Name:** Vinayak Kumar Singh

Subject: Java Programming Lab (PMCA502P)

3.B Logical OR:

1. Write a Java program that checks whether a given number is divisible by either 3 or 5. If it is, print "Divisible"; otherwise, print "Not divisible."

Code:

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter a number: ");
        int number = input.nextInt();
        String result = (number % 3 == 0 || number % 5 == 0) ? "Divisible" : "Not
divisible";
        System.out.println(result);
        input.close();
    }
}
```

Main.java

```
1  import java.util.Scanner;
2  public class Main {
3      public static void main(String[] args) {
4          Scanner input = new Scanner(System.in);
5          System.out.println("23MCA1030");
6          System.out.print("Enter a number: ");
7          int number = input.nextInt();
8          String result = (number % 3 == 0 || number % 5 == 0) ? "Divisible" : "Not divisible";
9          System.out.println(result);
10         input.close();
11     }
12 }
13
```

input

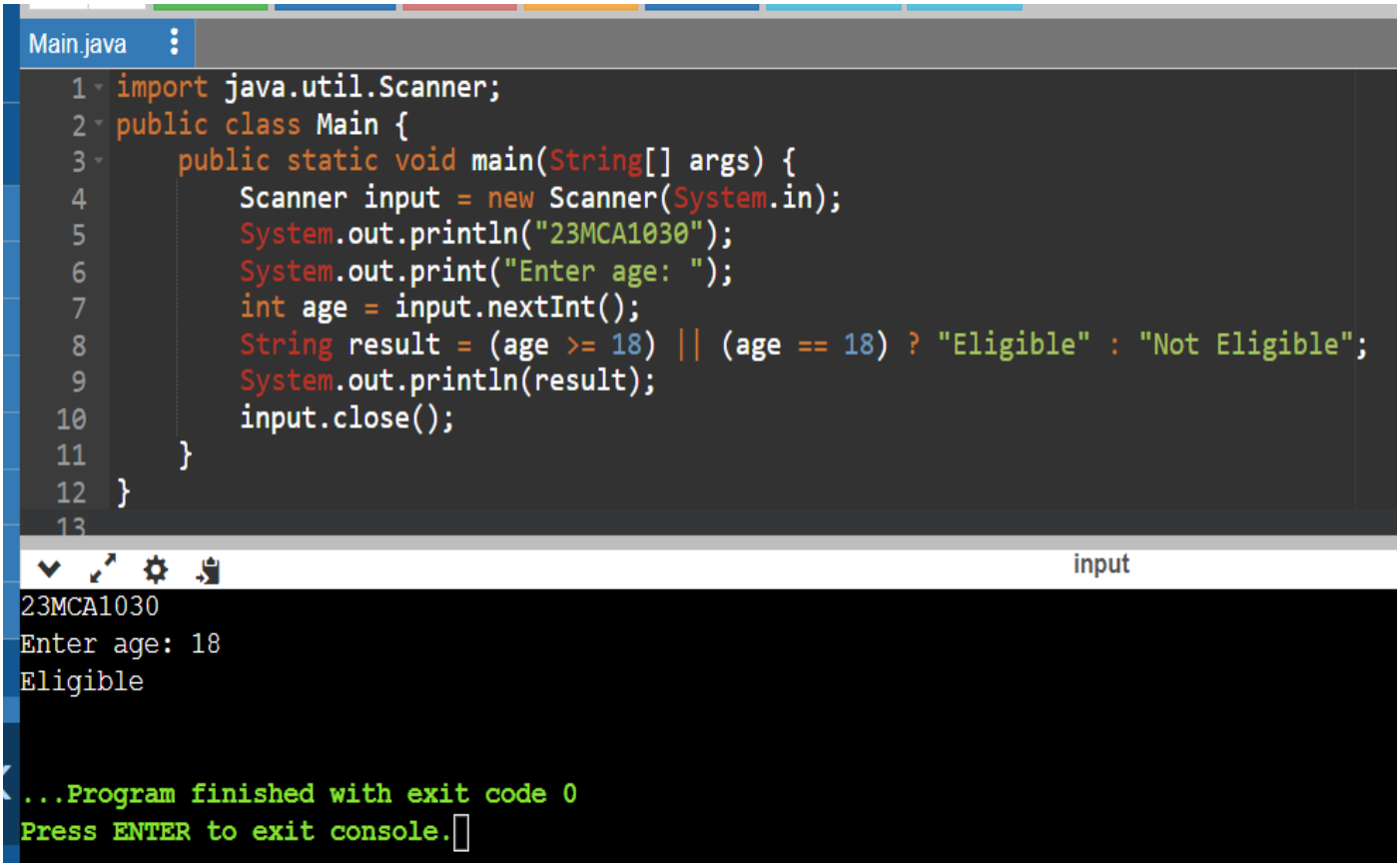
```
23MCA1030
Enter a number: 9
Divisible


...Program finished with exit code 0
Press ENTER to exit console.
```

2. Create a Java program to determine if a person is eligible to vote. The eligibility age is 18. Check if the age entered by the user is either equal to or greater than 18. Print "Eligible" if true, otherwise, print "Not Eligible."

Code:

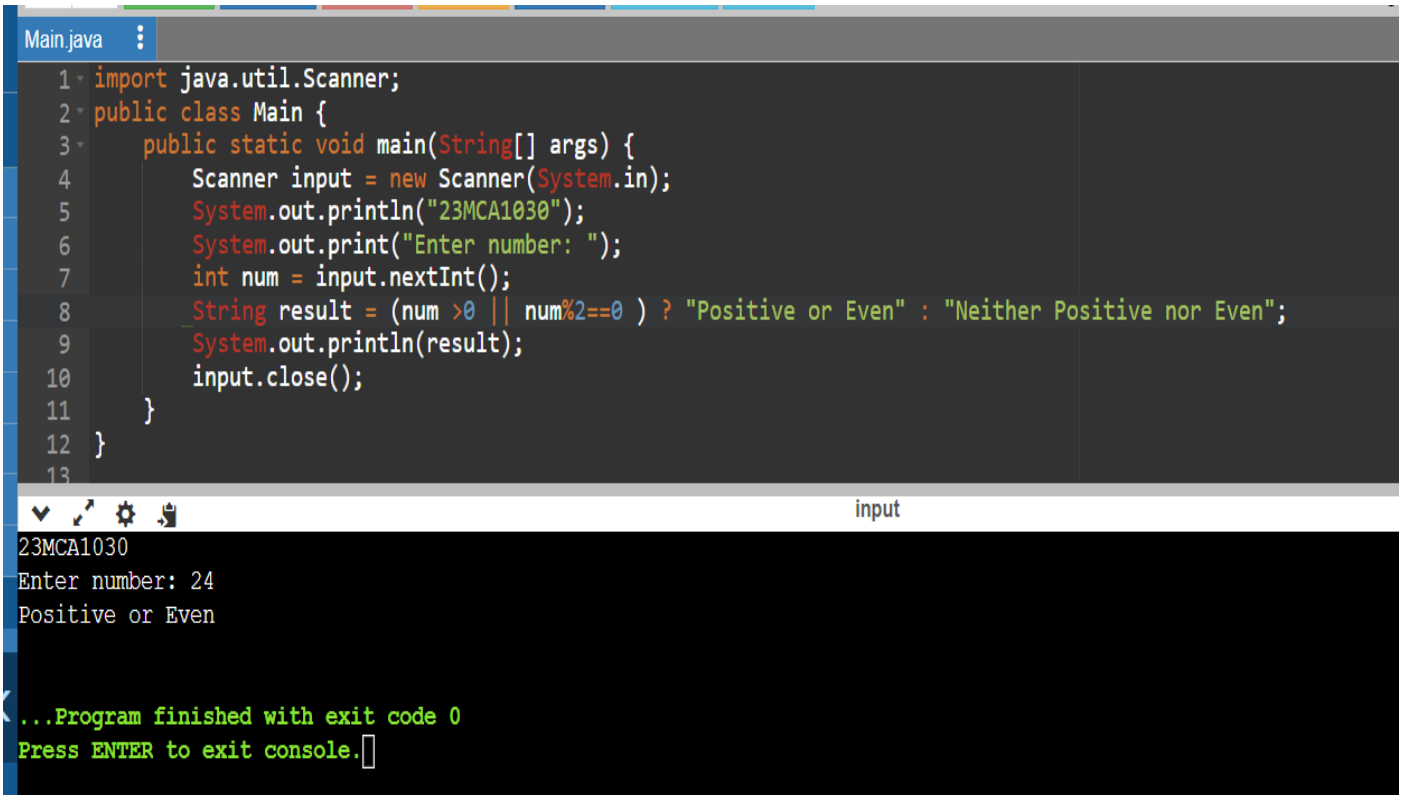
```java
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter age: ");
        int age = input.nextInt();
        String result = (age >= 18) || (age == 18) ? "Eligible" : "Not Eligible";
        System.out.println(result);
        input.close();
    }
}
```



3. Write a program to check if a given number is either positive or even. If the number is positive or even (or both), print "Positive or Even"; otherwise, print "Neither Positive nor Even."

Code:

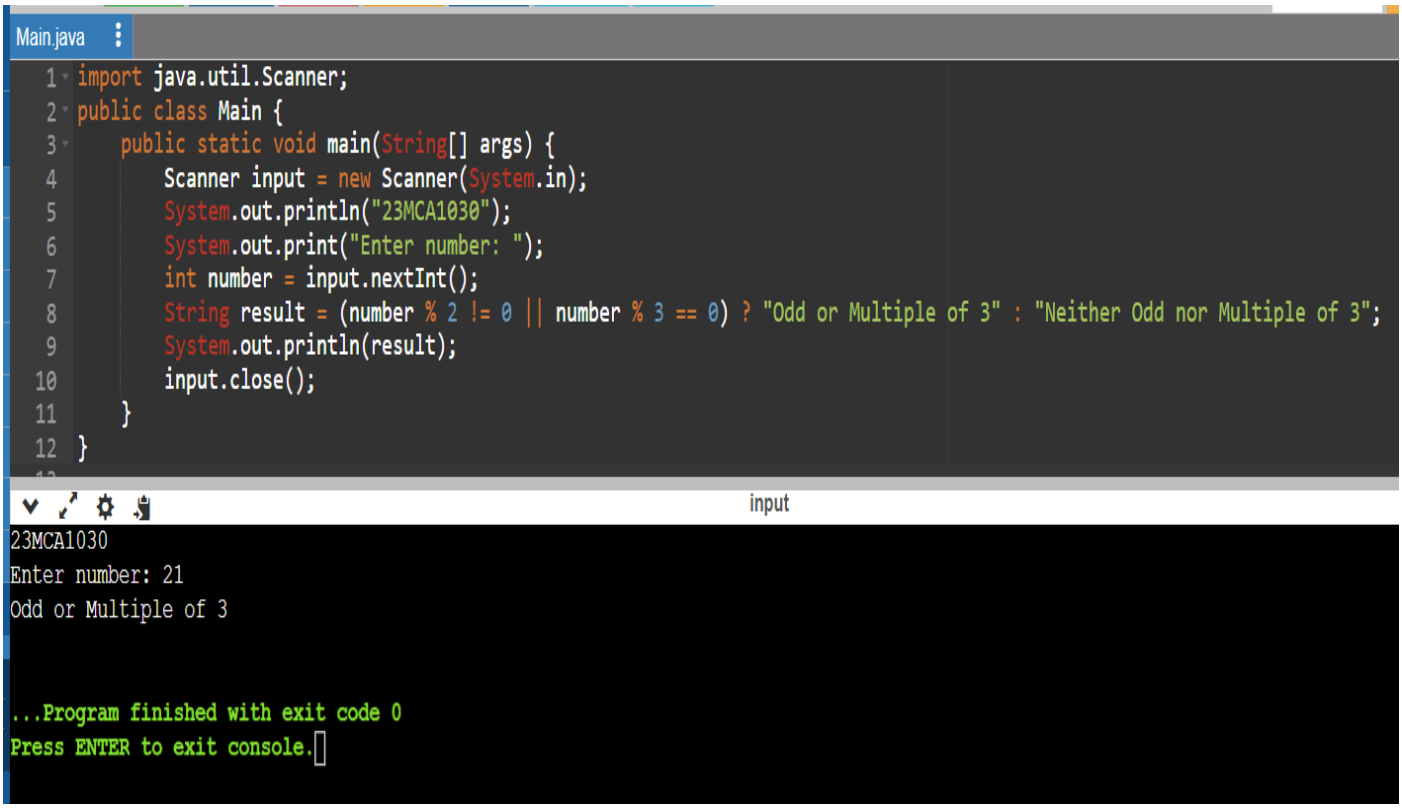
```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter number: ");
        int num = input.nextInt();
        String result = (num >0 || num%2==0 ) ? "Positive or Even" : "Neither Positive nor Even";
        System.out.println(result);
        input.close();
    }
}
```



4.Write a Java program that takes a number as input and checks whether it is either an odd number or a multiple of 3. If the condition is true, print "Odd or Multiple of 3"; otherwise, print "Neither Odd nor Multiple of 3."

Code:

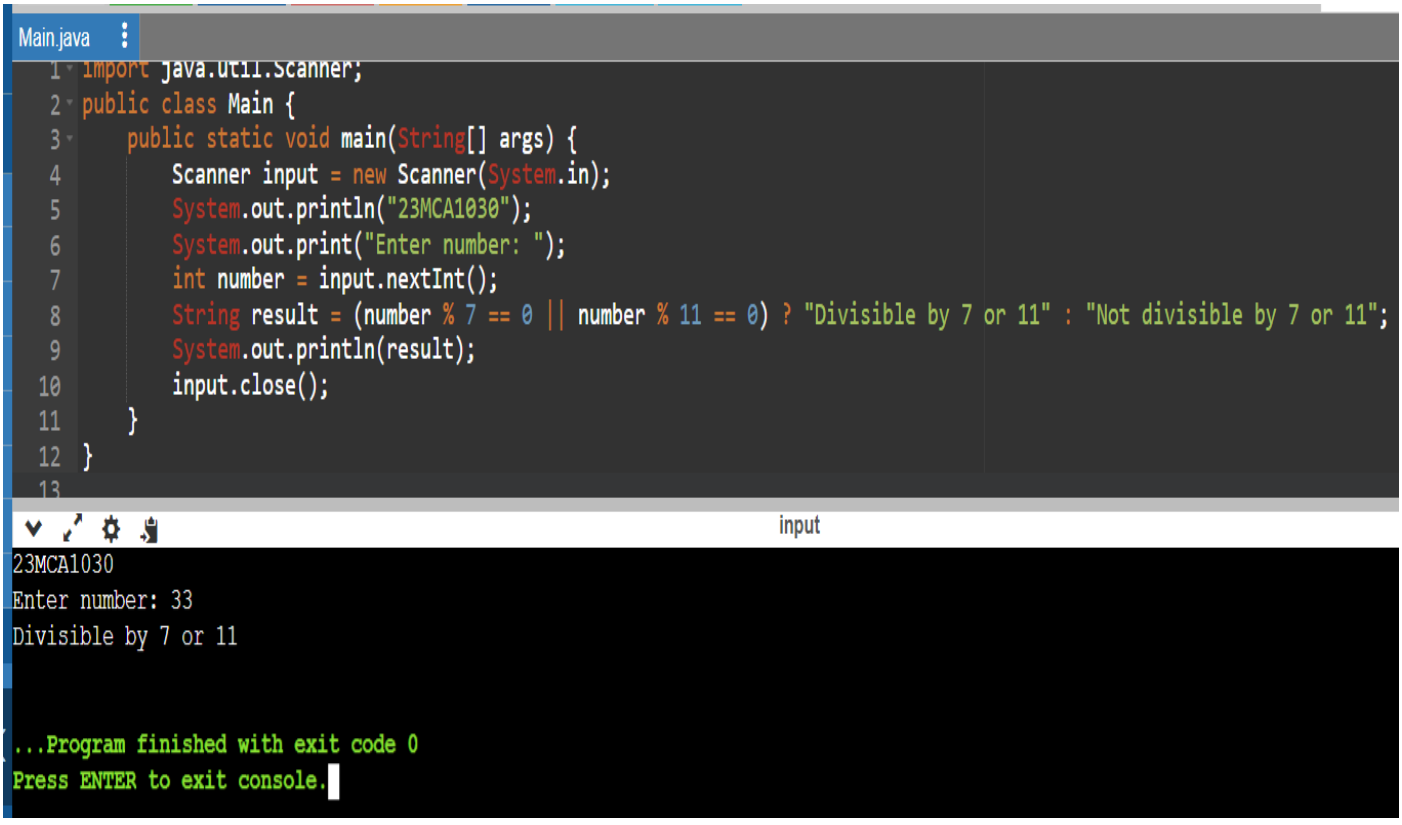
```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter number: ");
        int number = input.nextInt();
        String result = (number % 2 != 0 || number % 3 == 0) ? "Odd or Multiple of 3"
: "Neither Odd nor Multiple of 3";
        System.out.println(result);
        input.close();
    }
}
```



5. Implement a program that checks whether a given number is divisible by either 7 or 11. Print "Divisible by 7 or 11" if true; otherwise, print "Not divisible by 7 or 11."

Code:

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter number: ");
        int number = input.nextInt();
        String result = (number % 7 == 0 || number % 11 == 0) ? "Divisible by 7 or
11" : "Not divisible by 7 or 11";
        System.out.println(result);
        input.close();
    }
}
```



6. Write a program that takes the temperature as input and checks if it is either below freezing (less than 0 degrees Celsius) or above 40 degrees Celsius. Print "Below Freezing or Above 40 degrees" if true; otherwise, print "Temperature within acceptable range

Code:

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("23MCA1030");
        System.out.print("Enter the temperature in degrees Celsius: ");
        double temperature = input.nextDouble();
        String result = (temperature < 0 || temperature > 40) ? "Below Freezing or
Above 40 degrees" :  "Temperature within acceptable range";
        System.out.println( result);
        input.close();
    }
}
```