

```
// Program 1: Check if a number is divisible by 5
import java.util.Scanner;
```

```
class DivisibleByFive {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int number = input.nextInt();
        System.out.println("Is the number " + number + " divisible by 5? " + (number % 5 == 0));
        input.close();
    }
}
```

```
// Program 2: Check if the first number is the smallest of three
import java.util.Scanner;
```

```
class SmallestOfThree {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int num1 = input.nextInt();
        int num2 = input.nextInt();
        int num3 = input.nextInt();
        System.out.println("Is the first number the smallest? " + (num1 < num2 && num1 < num3));
        input.close();
    }
}
```

```
// Program 3: Find the largest among three numbers
import java.util.Scanner;
```

```
class LargestOfThree {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int num1 = input.nextInt();
        int num2 = input.nextInt();
        int num3 = input.nextInt();
        System.out.println("Is the first number the largest? " + (num1 > num2 && num1 > num3));
        System.out.println("Is the second number the largest? " + (num2 > num1 && num2 >
num3));
        System.out.println("Is the third number the largest? " + (num3 > num1 && num3 > num2));
        input.close();
    }
}
```

```
// Program 4: Sum of first n natural numbers
```

```

import java.util.Scanner;

class SumOfNaturalNumbers {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        if (n > 0) {
            int sum = n * (n + 1) / 2;
            System.out.println("The sum of " + n + " natural numbers is " + sum);
        } else {
            System.out.println("The number " + n + " is not a natural number");
        }
        input.close();
    }
}

```

// Program 5: Check voting eligibility

```

import java.util.Scanner;

class VotingEligibility {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int age = input.nextInt();
        if (age >= 18) {
            System.out.println("The person's age is " + age + " and can vote.");
        } else {
            System.out.println("The person's age is " + age + " and cannot vote.");
        }
        input.close();
    }
}

```

// Program 6: Check if a number is positive, negative, or zero

```

import java.util.Scanner;

class NumberCheck {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int number = input.nextInt();
        if (number > 0) {
            System.out.println("Positive");
        } else if (number < 0) {
            System.out.println("Negative");
        } else {

```

```

        System.out.println("Zero");
    }
    input.close();
}
}

```

// Program 7: Check if it's Spring Season
import java.util.Scanner;

```

class SpringSeason {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int month = input.nextInt();
        int day = input.nextInt();
        boolean isSpring = (month == 3 && day >= 20) || (month == 4) || (month == 5) || (month ==
6 && day <= 20);
        System.out.println(isSpring ? "It's a Spring Season" : "Not a Spring Season");
        input.close();
    }
}

```

// Program 8: Countdown using while loop
import java.util.Scanner;

```

class CountdownWhile {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int counter = input.nextInt();
        while (counter >= 1) {
            System.out.println(counter);
            counter--;
        }
        input.close();
    }
}

```

// Program 9: Countdown using for loop
import java.util.Scanner;

```

class CountdownFor {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int counter = input.nextInt();
        for (int i = counter; i >= 1; i--) {

```

```

        System.out.println(i);
    }
    input.close();
}
}

```

// Program 10: Sum of numbers until zero
import java.util.Scanner;

```

class SumUntilZero {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        double total = 0, num;
        while ((num = input.nextDouble()) != 0) {
            total += num;
        }
        System.out.println("Total sum: " + total);
        input.close();
    }
}

```

// Program 11: Sum of numbers until negative
import java.util.Scanner;

```

class SumUntilNegative {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        double total = 0, num;
        while (true) {
            num = input.nextDouble();
            if (num <= 0) break;
            total += num;
        }
        System.out.println("Total sum: " + total);
        input.close();
    }
}

```

// Program 12 : Sum of n natural numbers using while loop
import java.util.Scanner;

```

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

```

```

        int n = input.nextInt();
        int sum = 0, i = 1;
        while (i <= n) {
            sum += i++;
        }
        System.out.println("Sum: " + sum);
        input.close();
    }
}

```

// Program 13 : Sum of n natural numbers using for loop
import java.util.Scanner

```

class SumNaturalFor {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        int sum = 0;
        for (int i = 1; i <= n; i++) {
            sum += i;
        }
        System.out.println("Sum: " + sum);
        input.close();
    }
}

```

//Program 14: Factorial of an integer using While Loop
import java.util.Scanner;

```

class FactorialWhile {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        if (n < 0) {
            System.out.println("Invalid input. Enter a non-negative integer.");
        } else {
            long factorial = 1;
            int i = 1;
            while (i <= n) {
                factorial *= i;
                i++;
            }
            System.out.println("Factorial of " + n + " is: " + factorial);
        }
    }
}

```

```
        input.close();
    }
}
```

//Program 15: Factorial of an integer using For Loop

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

```
class FactorialFor {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n = input.nextInt();
        if (n < 0) {
            System.out.println("Invalid input. Enter a non-negative integer.");
        } else {
            long factorial = 1;
            for (int i = 1; i <= n; i++) {
                factorial *= i;
            }
            System.out.println("Factorial of " + n + " is: " + factorial);
        }
        input.close();
    }
}
```