1)

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner nm=new Scanner (System.in);
        System.out.println("input a number");
        int num=nm.nextInt();
        if (num > 0){
           System.out.println("number is positive"+ num);
        }else if (num == 0){
            System.out.println("number is zero");
        }else{
        System.out.println("number is negative");
        }
    }
}
```

2)

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner nm=new Scanner (System.in);
        System.out.println("input a number");
        int num=nm.nextInt();
        int x= num % 2;
        if (x == 0){
           System.out.println("number is even" + num);
        }else if (x != 0){
            System.out.println("number is odd" + num);
        }
    }
}
```

3)

```
import java.util.Scanner;
class main{
    public static void main(String[] args){
        Scanner nd=new Scanner(System.in);
        System.out.println("input number 1");
        int num1=nd.nextInt();
```

```
        Scanner ne=new Scanner(System.in);
        System.out.println("input number 2");
        int num2=ne.nextInt();
        if(num1 > num2){
            System.out.println("number 1 is the largest");
        }else {
            System.out.println("number 2 is the largest");
        }

    }
}
```

4)

```
import java.util.Scanner;
class main{
    public static void main(String[] args){
        Scanner nd=new Scanner(System.in);
        System.out.println("input number 1");
        int num1=nd.nextInt();
        Scanner ne=new Scanner(System.in);
        System.out.println("input number 2");
        int num2=ne.nextInt();
        Scanner ni=new Scanner(System.in);
        System.out.println("input number 3");
        int num3=ni.nextInt();
        if(num1 > num2 && num1 > num3){
            System.out.println("number 1 is the largest");
        }else if(num2 > num1 && num2 > num3){
            System.out.println("number 2 is the largest");
        }else{
            System.out.println("number 3 is the largest");
        }

    }
}
```

5)

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner lyear=new Scanner (System.in);
```

```
        System.out.println("enter the year");
        int num=lyear.nextInt();
        int leap= num % 400;
        if (leap == 0){
           System.out.println("the year" +  + num + "is  a leap year");
        }else {
            System.out.println("the year"+  + num + "is not a leap year");
        }
    }
}
```

6)

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner vchar=new Scanner (System.in);
        System.out.println("enter the character");
        char ch=vchar.next().charAt(0);
        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
{
           System.out.println("the character is vowel");
        }else {
            System.out.println("the character is consonant");
        }
    }
}
```

7)

```
import java.util.Scanner;

class Main {
    public static void main(String[] args) {
        Scanner nm = new Scanner(System.in);
        System.out.println("Enter any character: ");

        char ch = nm.next().charAt(0);

        if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
            System.out.println("It is an Alphabet");
        }
        else if (ch >= '0' && ch <= '9') {
```

```
            System.out.println("It is a Number");
        }
        else {
            System.out.println("It is a Special Character");
        }
    }
}
```

8)

```
import java.util.Scanner;
class main{
    public static void main(String[] args){
        Scanner in=new Scanner(System.in);
        System.out.println("enter your marks" );
        int marks = in.nextInt();
        char grade;
          if (marks >= 0 && marks <= 100){

        if(marks >=89){
            grade= 'A';
        }else if(marks >=79){
            grade='B';
        }else if(marks >=69){
            grade= 'C';
        }else if(marks >=59){
            grade = 'D';
        }else if(marks >=49){
            grade = 'E';
        }else{
            grade = 'F';
        }

          System.out.println("your grade for the given marks is: " + grade);

        }else{
            System.out.println("invalid marks");
        }

    }

}
```

9)

```
import java.util.Scanner;
class Main{
    public static void main(String[] args){
        Scanner dd=new Scanner(System.in);
        System.out.println("Select from 1-7 days from this");
        int day=dd.nextInt();
        switch(day) {
            case 1: System.out.println("Monday");
            break;

            case 2: System.out.println("Tuesday");
            break;

              case 3: System.out.println("Wednesday");
            break;

              case 4: System.out.println("Thurday");
            break;

              case 5: System.out.println("Friday");
            break;

              case 6: System.out.println("Saturday");
            break;

              case 7: System.out.println("Sunday");
            break;

            default:
            System.out.println("INVALID NUMBER ");

        }

    }
}
```

10)

```
import java.util.Scanner;

class Main {
   public static void main(String[] args) {
   Scanner sc =new Scanner(System.in);
      char operator;
      double number1, number2, result;

      System.out.println("Choose an operator: +, -, *, or /");
      operator  = sc.next().charAt(0);

      System.out.println("Enter first number");
      number1 = sc.nextDouble();

      System.out.println("Enter second number");
      number2 = sc.nextDouble();

      switch (operator) {
         case '+':
            result = number1 + number2;
            System.out.println(number1 + " + " + number2 + " = " + result);
            break;

         case '-':
            result = number1 - number2;
            System.out.println(number1 + " - " + number2 + " = " + result);
            break;

         case '*':
            result = number1 * number2;
            System.out.println(number1 + " * " + number2 + " = " + result);
            break;

         case '/':

            if (number2 != 0) {
               result = number1 / number2;
               System.out.println(number1 + " / " + number2 + " = " + result);
            } else {
               System.out.println("Error! Division by zero is not allowed.");
            }
            break;

         default:
            System.out.println("Invalid operator!");
            break;
```

```
        }

    }
}
```

11)

```
import java.util.Scanner;
class  main{
    public static void main(String[] args){
    Scanner sc = new Scanner(System.in);
    System.out.println("enter the number");
    double num=sc.nextDouble();
    if(num%5==0 || num%11 == 0){
        System.out.println("the number is divisible by 5 or 11");
    }else{
        System.out.println("the number is not divisible by 5 or 11");
    }
}}
```