CONDITIONAL STATEMENTS

1. Calculator

```java
import java.util.Scanner;

public class Calculator {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.println("Enter num1 - ");
        int num1 = sc.nextInt();
        System.out.println("Enter num2 - ");
        int num2 = sc.nextInt();
        // If we write only sc.next() then we can only input String, so to write the chararcter we use charAt.
        System.out.println("Enter Operator - ");
        char operator = sc.next().charAt(0);
        switch (operator) {
            case '+':
                System.out.println("Addition: ");
                System.out.println(num1 + num2);
                break;
            case '-':
                System.out.println("Subtraction: ");
                System.out.println(num1 - num2);
                break;
            case '*':
                System.out.println("Multiplication: ");
                System.out.println(num1 * num2);
                break;
            case '/':
                System.out.println("Division: ");
                System.out.println(num1 / num2);
                break;
            case '%':
                System.out.println("Modulos: ");
                System.out.println(num1 % num2);
                break;

            default: System.out.println("ERROR");
                break;
        }
    }
}
```

2. Else-if

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

        // CONDITIONAL STATEMENTS
        // else if
        int age = sc.nextInt();

        // if ADULT statement is true then after all statements will not be checked and executed.
        if (age >= 18) {
            System.out.println("ADULT");
        }
        else if (age >= 13 && age < 18) {
            System.out.println("TEENAGER");
        }
        else {
            System.out.println("CHILD");
        }
    }
}
```

3. Even /Odd

```java
import java.util.Scanner;

public class evenodd {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int num = sc.nextInt();
        if (num % 2 == 0) {
            System.out.println("It's an Even Number.");
        }
        else {
            System.out.println("It's an Odd Number.");
        }
    }
}
```

4. Fever or not

```java
import java.util.Scanner;

public class fever {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.print("Enter Temperature: ");
        double temp = sc.nextDouble();
        if (temp < 100) {
            System.out.println("You don't have fever.");
        }
        else {
            System.out.println("You have fever.");
        }
    }
}
```

5. If-else

```java
import java.util.Scanner;

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

        // CONDITIONAL STATEMENTS
        // if - else
        int age = sc.nextInt();
        if (age >= 5 && age < 18) {
            System.out.println("You're a Boy.");
        }
        if (age >= 18 && age < 21) {
            System.out.println("You're an Adult");
        }
        else {
            System.out.println("You're a Teenager.");
        }
    }
}
```

6. Largest of Three Numbers

```java
import java.util.Scanner;

public class largestofthree {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        int a = sc.nextInt();
        int b = sc.nextInt();
        int c = sc.nextInt();

        if (a >= b && a >= c) {
            System.out.println(a +" is the largest number.");
        }
        else if (b >= a && b >= c) {
            System.out.println(b +" is the largest number.");
        }
        else {
            System.out.println(c +" is the largest number.");
        }
    }
}
```

7. Largest of Two

```java
import java.util.Scanner;

public class largestoftwo {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int a = sc.nextInt();
        int b = sc.nextInt();
        if (a > b) {
            System.out.println("a is greater than b");
        }
        if (a == b) {
            System.out.println("a & b are equal.");
        }
        else {
            System.out.println("b is greater than a");
        }
    }
}
```

8. Leap Year

```java
import java.util.Scanner;

public class leapyear {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.print("Enter Year: ");
        long year = sc.nextLong();
        if (year % 4 == 0)
        {
            System.out.println("LEAP YEAR");
        }
        else
        {
            System.out.println("NOT LEAP YEAR");
        }
    }
}
```

9. Pass/Fail

```java
import java.util.Scanner;
public class passfail {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        int marks = sc.nextInt();
        String type = (marks >= 33) ? "PASS" : "FAIL";
        System.out.println(type);
    }
}
```

10.Positive/Negative

```java
import java.util.Scanner;
public class posneg {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.print("Enter Number: ");
        int num = sc.nextInt();
        if (num >= 0) {
            System.out.println("Number is Positive");
        }
        else {
            System.out.println("Number is Negative");
        }
    }
}
```

11.Switch-case

```java
import java.util.Scanner;
public class swicthcase {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        int num = sc.nextInt();
        switch (num) {
            case 1:
                System.out.println("Chicken");
                break;
            case 2:
                System.out.println("Fish");
                break;
            case 3:
                System.out.println("Egg");
                break;

            default: System.out.println("We wake up");
                break;
        }
    }
}
```

12. Ternary Operator

```java
public class xandy {
    public static void main(String[] args) {
        int a = 63, b = 36;
        boolean x = (a < b) ? true : false;
        int y = (a > b) ? a : b;
        System.out.println(x);
        System.out.println(y);
    }
}
```

13.Tax Calculator

```java
import java.util.Scanner;
public class taxcalculator {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        int income = sc.nextInt();
        double tax;
        if (income < 500000) {
            tax = 0;
        }
        else if (income >= 500000 && income < 1000000) {
            tax = income * 0.2;
        }
        else {
            tax = income * 0.3;
        }
        System.out.println("Your tax is : " + tax);
    }
}
```

14.Ternary Operator

```java
public class ternary {
    public static void main(String[] args) {
        int number = 5;
        //TERNARY OPERATOR
        String type = (number % 2 == 0) ? "Even" : "Odd";
        System.out.println(type);
    }
}
```

15.Weekly Days

```java
import java.util.Scanner;
public class week {
    public static void main(String[] args) {
        Scanner sc = new Scanner (System.in);
        System.out.print("Enter the Week Day (1-7): ");
        int week = sc.nextInt();
        switch (week) {
            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("Thursday");
                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 Week Day!!");
                break;
        }
    }
}
```