

Simple Java Programs

1. To find sum of two numbers

```
// Program to find sum of two numbers

import java.util.Scanner;

public class Add{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of a: ");
        int a = Ob1.nextInt();

        System.out.println("Enter value of b: ");
        int b = Ob1.nextInt();

        int c = a+b;
        System.out.println("Sum of given two numbers is: " +c);
    }
}
```

2. Finding Area of the square

```
// Program to find area of a square

import java.util.Scanner;

public class AreaSquare{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter length of square L: ");
        int L = Ob1.nextInt();

        int area = L*L;

        System.out.println("Area of square is: " +area);
    }
}
```

3. Finding Area of the rectangle

```
// Program to find area of rectangle

import java.util.Scanner;

public class AreaRectangle{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter side length a: ");
        int a = Ob1.nextInt();

        System.out.println("Enter side length b: ");
        int b = Ob1.nextInt();

        int area = a*b;

        System.out.println("Area of rectangle is is: " +area);
    }
}
```

4. Area of a triangle where three sides are given

```
// Program to find area of triangle
// Input values a=5, b =8, c =10

import java.util.Scanner;

public class AreaTriangle{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter side length a: ");
        int a = Ob1.nextInt();

        System.out.println("Enter side length b: ");
        int b = Ob1.nextInt();

        System.out.println("Enter side length c: ");
        int c = Ob1.nextInt();

        float s = (a+b+c)/2;

        double area = Math.sqrt(s*(s-a)*(s-b)*(s-c));

        System.out.println("Area of Triangle is is: " +area);
    }
}
```

5. Find the area & perimeter of a square

```
// Area & Perimeter of a square

import java.util.Scanner;

public class Square{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter length of square L: ");
        int L = Ob1.nextInt();

        int A = L*L;
        int P = 4*L;

        System.out.println("Area of square = : " +A);
        System.out.println("Perimeter of square = : " +P);
    }
}
```

6. Calculating the average for 3 numbers

```
// Average of 3 numbers

import java.util.Scanner;

public class Avg3Nums{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of A: ");
        int A = Ob1.nextInt();

        System.out.println("Enter value of B: ");
        int B = Ob1.nextInt();

        System.out.println("Enter value of C: ");
        int C = Ob1.nextInt();

        float Avg = (A+B+C)/3;

        System.out.println("Average is: " +Avg);
    }
}
```

7. Greatest of two numbers

```
// Greatest of two numbers

import java.util.Scanner;

public class XYZ{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of A: ");
        int A = Ob1.nextInt();

        System.out.println("Enter value of B: ");
        int B = Ob1.nextInt();

        if (A>B)
            System.out.println("A is Larger ");
        else
            System.out.println("B is Larger ");
        }
    }
}
```

8. Interchange the value of two variables

```
// Interchange two variables

import java.util.Scanner;

public class Interchange{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of a: ");
        int a = Ob1.nextInt();

        System.out.println("Enter value of b: ");
        int b = Ob1.nextInt();

        int c = a;
        a = b;
        b = c;

        System.out.println("values after swapping: ");
        System.out.println(+a);
        System.out.println(+b);
        }
    }
}
```

9. Calculate simple interest using the expression (SI=PNR/100)

```
// Simple Interest

import java.util.Scanner;

public class SimpleInterest{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of P: ");
        int P = Ob1.nextInt();

        System.out.println("Enter value of N: ");
        int N = Ob1.nextInt();

        System.out.println("Enter value of R: ");
        int R = Ob1.nextInt();

        float SI = (P*N*R)/100;
        System.out.println("Simple Interest is: " +SI);
    }
}
```

10. Convert temperature from Fahrenheit to Celsius

```
// Fahrenheit to Celsius

import java.util.Scanner;

public class FtoC{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter Fahrenheit value F: ");
        int F = Ob1.nextInt();

        float C = (F-32)*5/9;

        System.out.println("Temp in Celsius is: " +C);
    }
}
```

11. Draw a flowchart for computing factorial N, where $N! = 1 * 2 * 3 * \dots * N$

```
// Factorial of number

import java.util.Scanner;

public class Factorial{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);

        System.out.println("Enter value of N: ");
        int N = Ob1.nextInt();

        int F =1;
        for(int i =1; i<=N; i++)
            F = F*i;

        System.out.println("Factorial of N is: " +F);
    }
}
```

12. Find the Sum of First 5 Natural Numbers

```
// Sum of First 5 Natural Numbers

import java.util.Scanner;

public class Sum5{
    public static void main(String [] args){

        int sum = 0;

        for(int count =1; count<=5; count++)
            sum = sum + count;

        System.out.println("Sum is: " +sum);
    }
}
```

13. Calculating sum of integers 1 to 100

```
// Sum of integers 1 to 100

import java.util.Scanner;

public class Sum1to100{
    public static void main(String [] args){

        int sum = 0;

        for(int i=1; i<101; i++)
            sum = sum + i;

        System.out.println("Sum is: " +sum);
    }
}
```

14. To find the sum of n natural Numbers

```
// sum of n natural Numbers

import java.util.Scanner;

public class SumofN{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);
        System.out.println("Enter value of n:");
        int n = Ob1.nextInt();

        int sum = 0;

        for(int i=1; i<=n; i++)
            sum = sum + i;
        System.out.println("Sum of integers upto n is:");
        System.out.println("Sum is: " +sum);
    }
}
```

15. Sum of squares of n natural numbers

```
// Sum of squares of n natural numbers

import java.util.Scanner;

public class SumofSquaresofN{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);
        System.out.println("Enter value of n:");
        int n = Ob1.nextInt();

        int sum = 0;

        for(int i =1; i<=n; i++)
            sum = sum + i*i;
        System.out.println("Answer is:" +sum);
    }
}
```

16. To find the sum of all even numbers up to 'n'

```
// Sum of all even numbers up to 'n'

import java.util.Scanner;

public class SumofEvenUptoN{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);
        System.out.println("Enter value of n:");
        int n = Ob1.nextInt();

        int sum = 0;
        int count = 0;
        while(count<=n)
        {
            sum = sum + count;
            count = count +2;
        }

        System.out.println("Answer is:" +sum);
    }
}
```


17. To find Product of numbers up to N

```
// Product of numbers upto N

import java.util.Scanner;

public class ProdofN{
    public static void main(String [] args){

        Scanner Ob1 = new Scanner(System.in);
        System.out.println("Enter value of n:");
        int n = Ob1.nextInt();

        int prod = 1;

        for(int i=1; i<=n; i++)
            prod = prod * i;

        System.out.println("Product of numbers upto n is:");
        System.out.println(+prod);
    }
}
```

18. Sum of first 50 odd numbers

```
// Sum of first 50 odd numbers

import java.util.Scanner;

public class abc{
    public static void main(String [] args){

        int sum = 0;
        int count =1;

        while(count<=99)
        {
            sum = sum + count;
            count = count +2;
        }

        System.out.println("Answer is:" +sum);
    }
}
```