```java
package Assignment;

import java.util.Scanner;

public class Square_Differences {

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Number:");
        int number=sc.nextInt();
        System.out.println("The difference between the sum of the Squares of the first n natural numbers and the Square of their sum is: "+calculateDifference(nur

    }
    public static int calculateDifference(int number)
    {
        int sumOfSquares=0,sum=0,result=0;
        for(int i=1;i<=number;i++)
        {
            sumOfSquares=sumOfSquares+(i*i);
            sum+=i;
        }
        result=sumOfSquares-(sum*sum);
        return result;
    }

}

```

```
<terminated> Square_Differences [Java Application] C:\Users\2380179\Downloads\sts-4.27.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21
Enter the Number:
100
The difference between the sum of the Squares of the first n natural numbers and the Square of their sum is: -25164150
```

```java
package Assignment;

import java.util.Scanner;

public class Increasing_Number {

    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Number:");
        int number=14679;
        boolean result=checkNumber(number);
        if(result)
        {
            System.out.println(number+" is an increasing number");
        }
        else {
            System.out.println(number+" is not an increasing number");
        }

    }
    public static boolean checkNumber(int number)
    {
        while(number>0)
        {
            int number1=number%10;
            number/=10;
            int number2=number%10;

            if(number1<number2)
            {
                return false;
            }
        }
        return true;
    }

```

```
<terminated> Increasing_Number [Java Application] C:\Users\2380179\Downloads\sts-4.27.0.RELEASE\plugins\org.ecli
Enter the Number:
14679 is an increasing number
```

```java
package Assignment;

import java.util.Scanner;

public class Check_Number {

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Number: ");
        int number=sc.nextInt();
        Check_Number obj=new Check_Number();
        boolean result=obj.checkNumber(number);
        if(result)
        {
            System.out.println(number+" is a Power of 2");
        }
        else {
            System.out.println(number+" is not a Power of 2");
        }
    }
    public boolean checkNumber(int number)
    {
        int i=1,res=0;
        while(true)
        {
            int j=0,sum=1;
            while(j<i)
            {
                sum*=2;
                j++;
            }
            i++;
            if(sum>=number)
            {
                res=sum;
```

```
<terminated> Check_Number [Java Application] C:\
8
8 is a Power of 2
```

Natural_Num.java | Square_Differences.java | Increasing_Number.java | Check_Number.java | Employee_Info.java | Operations.java | Find_Smallest_N

```java
package Assignment;

import java.util.Scanner;

public class Employee_Info {

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the Employee Id: ");
        int empId=sc.nextInt();
        sc.nextLine();
        System.out.println("Enter the Employee Name: ");
        String empName=sc.nextLine();
        System.out.println("Enter the Employee's Salary: ");
        double empSalary=sc.nextDouble();
        sc.nextLine();
        System.out.println("Enter the Employee Address: ");
        String empAdd=sc.nextLine();
        System.out.println("Enter the Employee Gender (M/F): ");
        char empGender=sc.next().charAt(0);
        sc.nextLine();
        System.out.println("Enter the Employee's Email: ");
        String email=sc.nextLine();

        System.out.println("================================================================================");
        System.out.println("Employee's Id is: "+empId);
        System.out.println("Employee's Name is: "+empName.toUpperCase());
        System.out.println("Employee's Salary is: "+empSalary);
        System.out.println("Employee's Address is: "+empAdd);
        System.out.println("Employee's Gender is: "+empGender);
        System.out.println("Employee's Email is: "+email);

    }

}
```

Problems | Javadoc | Declaration | Console

```
<terminated> Employee_Info [Java Application] C:\Users\
Enter the Employee Id:
2380179
Enter the Employee Name:
Wahid
Enter the Employee's Salary:
100000
Enter the Employee Address:
Hyd
Enter the Employee Gender (M/F):
M
Enter the Employee's Email:
wahid@gmail.com
================================================================================
Employee's Id is: 2380179
Employee's Name is: WAHID
Employee's Salary is: 100000.0
Employee's Address is: Hyd
Employee's Gender is: M
Employee's Email is: wahid@gmail.com
```

Natural_Num.java | Square_Differences.java | Increasing_Number.java | Check_Number.java | Employee_Info.java | Operations.java | Find_Smallest_N

```java
package Assignment;

import java.util.Scanner;

public class Operations {

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the First Number:");
        int number1=sc.nextInt();
        System.out.println("Enter the Second Number:");
        int number2=sc.nextInt();

        int sum=number1+number2;
        int sub=number1-number2;
        int mul=number1*number2;
        int div=number1/number2;
        int modulos=number1%number2;

        System.out.println("The Addition Of 2 Numbers is: "+sum);
        System.out.println("The Addition Of 2 Numbers is: "+sub);
        System.out.println("The Addition Of 2 Numbers is: "+mul);
        System.out.println("The Addition Of 2 Numbers is: "+div);
        System.out.println("The Addition Of 2 Numbers is: "+modulos);


    }

}
```

Problems | Javadoc | Declaration | Console

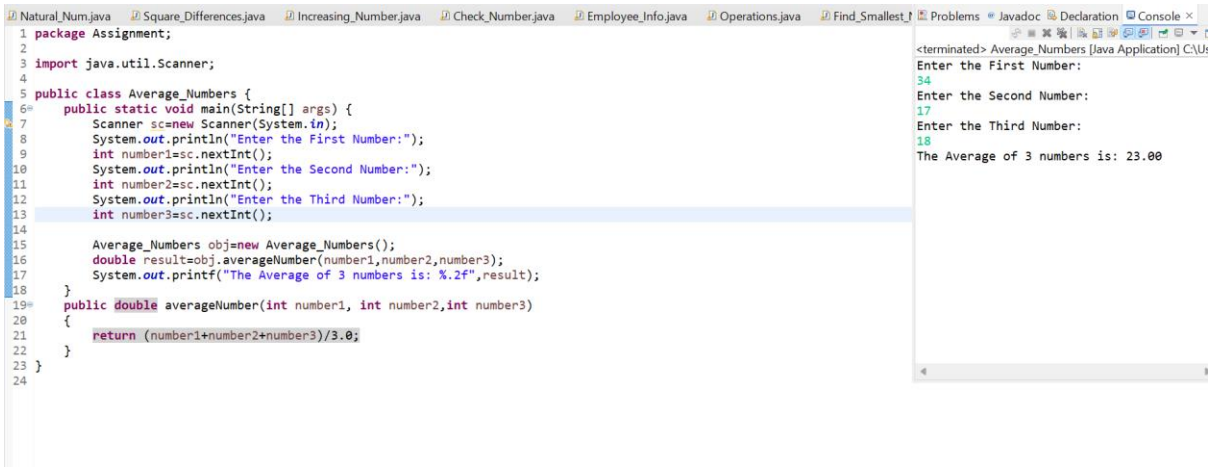
```
<terminated> Operations [Java Application] C:\Users\23
Enter the First Number:
1
Enter the Second Number:
100
The Addition Of 2 Numbers is: 101
The Addition Of 2 Numbers is: -99
The Addition Of 2 Numbers is: 100
The Addition Of 2 Numbers is: 0
The Addition Of 2 Numbers is: 1
```

Natural_Num.java | Square_Differences.java | Increasing_Number.java | Check_Number.java | Employee_Info.java | Operations.java | Find_Smallest_N

```java
package Assignment;

import java.util.Scanner;

public class Find_Smallest_Number {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the First Number:");
        int number1=sc.nextInt();
        System.out.println("Enter the Second Number:");
        int number2=sc.nextInt();
        System.out.println("Enter the Third Number:");
        int number3=sc.nextInt();

        float result=findSmallestNumber(number1,number2,number3);
        System.out.printf("The Smallest Value is: %.1f",result);
    }
    public static float findSmallestNumber(int number1, int number2,int number3)
    {
        if((number1<number2) && (number1<number3))
        {
            return number1;
        }
        else if((number1>number2) && (number2<number3))
        {
            return number2;
        }
        else {
            return number3;
        }
    }
}
```

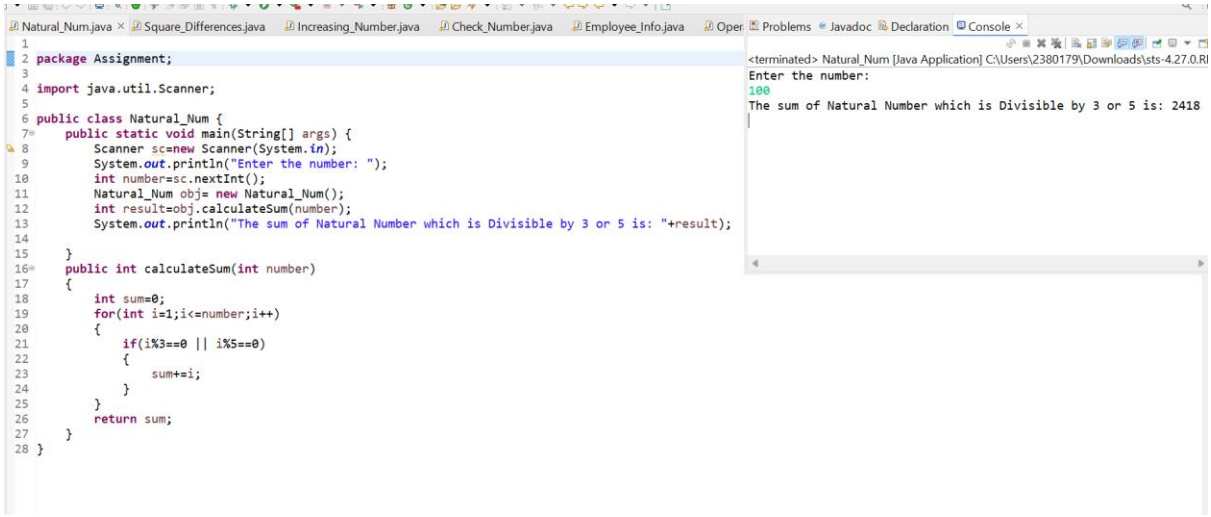
Problems | Javadoc | Declaration | Console

```
<terminated> Find_Smallest_Number [Java Applicatio
Enter the First Number:
1
Enter the Second Number:
100
Enter the Third Number:
16
The Smallest Value is: 1.0
```



```java
package Assignment;

import java.util.Scanner;

public class Average_Numbers {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the First Number:");
        int number1=sc.nextInt();
        System.out.println("Enter the Second Number:");
        int number2=sc.nextInt();
        System.out.println("Enter the Third Number:");
        int number3=sc.nextInt();

        Average_Numbers obj=new Average_Numbers();
        double result=obj.averageNumber(number1,number2,number3);
        System.out.printf("The Average of 3 numbers is: %.2f",result);
    }
    public double averageNumber(int number1, int number2,int number3)
    {
        return (number1+number2+number3)/3.0;
    }
}
```

```
<terminated> Average_Numbers [Java Application] C:\Us
Enter the First Number:
34
Enter the Second Number:
17
Enter the Third Number:
18
The Average of 3 numbers is: 23.00
```



```java
package Assignment;

import java.util.Scanner;

public class Natural_Num {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number: ");
        int number=sc.nextInt();
        Natural_Num obj= new Natural_Num();
        int result=obj.calculateSum(number);
        System.out.println("The sum of Natural Number which is Divisible by 3 or 5 is: "+result);

    }
    public int calculateSum(int number)
    {
        int sum=0;
        for(int i=1;i<=number;i++)
        {
            if(i%3==0 || i%5==0)
            {
                sum+=i;
            }
        }
        return sum;
    }
}
```

```
<terminated> Natural_Num [Java Application] C:\Users\2380179\Downloads\sts-4.27.0.RE
Enter the number:
100
The sum of Natural Number which is Divisible by 3 or 5 is: 2418
```