

# VIT<sup>®</sup>

**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

## **Computer Programming**

### **Java**

#### **LAB TASK 1**

**Faculty: Sathya Raj R**

**Slot: L3+L4+L29+L30**

**Venue: SJT 515**

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## SET 3

**Q1: Write a Java program that accepts an integer (n) from the user and computes the value of  $(n+n)+(n+n^2)+(n+n^3)+(n+n^4)$ .**

### CODE:

```
import java.util.Scanner;
public class Test
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        //Take user input
        System.out.println("Enter the value of n: ");
        int n=sc.nextInt();
        int sum=0;
        //calculate sum
        sum=(n+n)+(n+n*n)+(n+n*n*n)+(n+n*n*n*n);
        //print result
        System.out.println("The result is:"+sum);
    }
}
//21BCE4007
//Soumyojyoti Saha
```

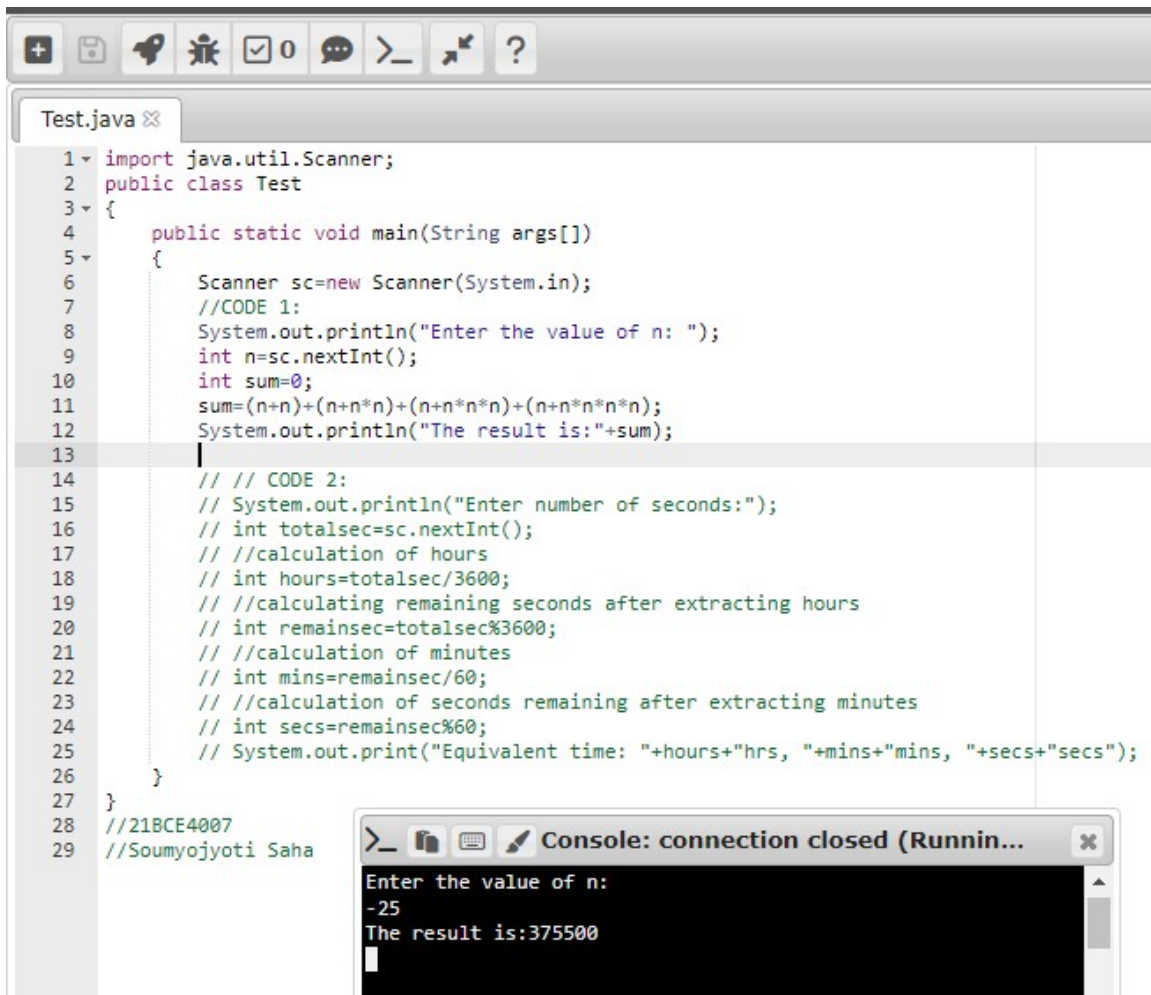
### OUTPUT:

**1. n=5**

```
Test.java ✕
1 import java.util.Scanner;
2 public class Test
3 {
4     public static void main(String args[])
5     {
6         Scanner sc=new Scanner(System.in);
7         //CODE 1:
8         System.out.println("Enter the value of n: ");
9         int n=sc.nextInt();
10        int sum=0;
11        sum=(n+n)+(n+n*n)+(n+n*n*n)+(n+n*n*n*n);
12        System.out.println("The result is:"+sum);
13
14        // // CODE 2:
15        // System.out.println("Enter number of seconds:");
16        // int totalsec=sc.nextInt();
17        // //calculation of hours
18        // int hours=totalsec/3600;
19        // //calculating remaining seconds after extracting hours
20        // int remainsec=totalsec%3600;
21        // //calculation of minutes
22        // int mins=remainsec/60;
23        // //calculation of seconds remaining after extracting minutes
24        // int secs=remainsec%60;
25        // System.out.print("Equivalent time: "+hours+"hrs, "+mins+"mins, "+secs+"secs");
26    }
27 }
28 //21BCE4007
29 //Soumyojyoti Saha
```

Console: connection closed (Running... ✕)  
Enter the value of n:  
5  
The result is:800  
█

2. n=-25



The screenshot shows an IDE window titled 'Test.java' with the following code:

```
1 import java.util.Scanner;
2 public class Test
3 {
4     public static void main(String args[])
5     {
6         Scanner sc=new Scanner(System.in);
7         //CODE 1:
8         System.out.println("Enter the value of n: ");
9         int n=sc.nextInt();
10        int sum=0;
11        sum=(n+n)+(n+n*n)+(n+n*n*n)+(n+n*n*n*n);
12        System.out.println("The result is:"+sum);
13    }
14    // // CODE 2:
15    // System.out.println("Enter number of seconds:");
16    // int totalsec=sc.nextInt();
17    // //calculation of hours
18    // int hours=totalsec/3600;
19    // //calculating remaining seconds after extracting hours
20    // int remainsec=totalsec%3600;
21    // //calculation of minutes
22    // int mins=remainsec/60;
23    // //calculation of seconds remaining after extracting minutes
24    // int secs=remainsec%60;
25    // System.out.print("Equivalent time: "+hours+"hrs, "+mins+"mins, "+secs+"secs");
26 }
27
28 //21BCE4007
29 //Soumyojyoti Saha
```

Below the code editor, a console window titled 'Console: connection closed (Runnin...)' shows the program's execution:

```
Enter the value of n:
-25
The result is:375500
```

**Q2: Write a Java program to convert an integer number of seconds to an equivalent number of hours, minutes, seconds. (Note: Read the input and if input is 52,400? Output as 14hrs, 33min, 20 secs).**

**CODE:**

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

```

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

// Prompt user for input
System.out.print("Enter number of seconds: ");
int totalSeconds = scanner.nextInt();

// Calculate hours
int hours = totalSeconds / 3600;
// Calculate remaining seconds after extracting hours
int remainingSeconds = totalSeconds % 3600;

// Calculate minutes
int minutes = remainingSeconds / 60;
// Calculate remaining seconds after extracting minutes
int seconds = remainingSeconds % 60;

// Output the result
System.out.println("Equivalent time: " + hours + "hrs, " + minutes
+ "min, " + seconds + "secs");
scanner.close();
}
}
//21BCE4007
//Soumyojyoti Saha

```

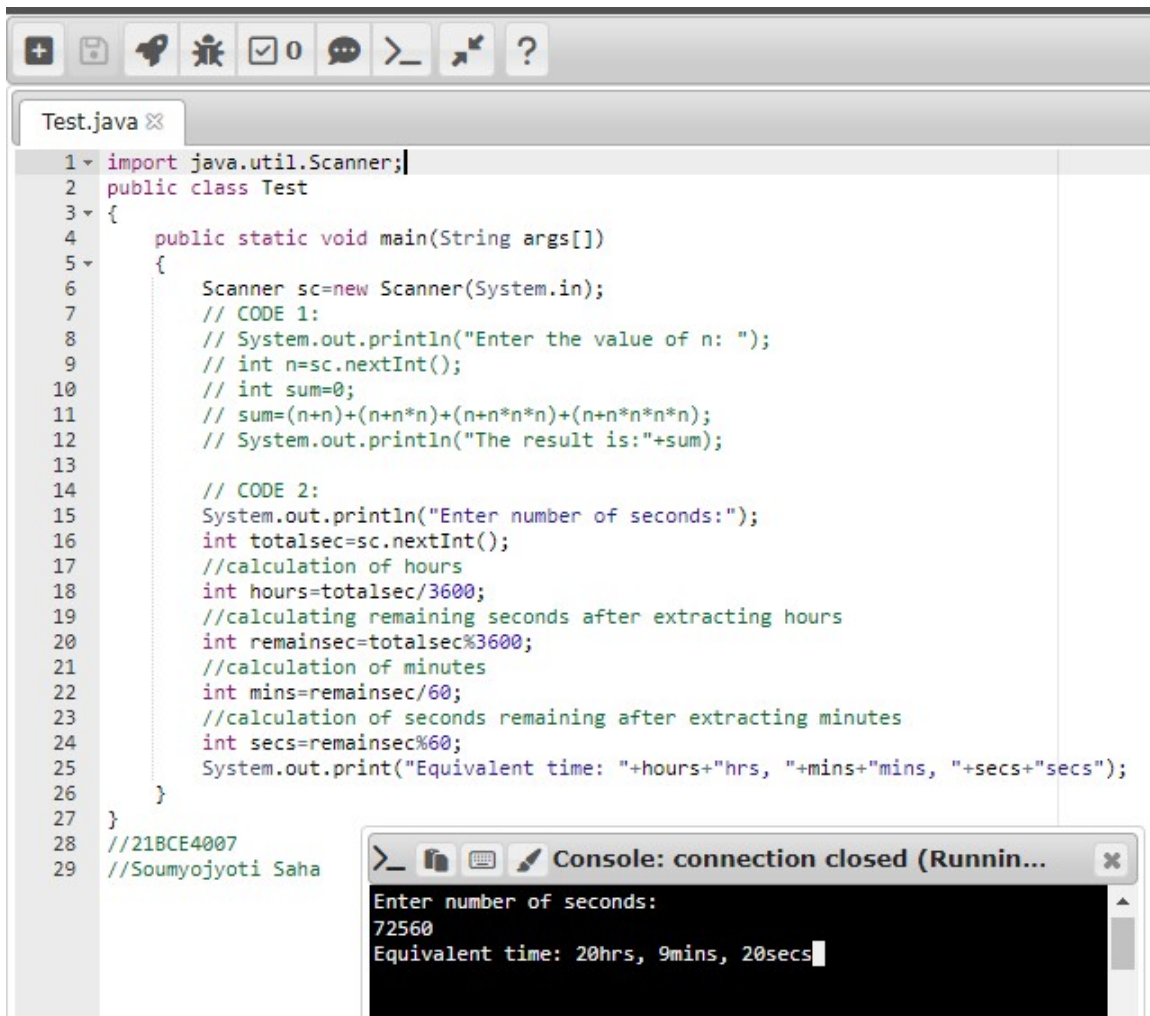
## OUTPUT:

**1.Total\_Seconds=52400**

```
Test.java ✕
1 import java.util.Scanner;
2 public class Test
3 {
4     public static void main(String args[])
5     {
6         Scanner sc=new Scanner(System.in);
7         // CODE 1:
8         // System.out.println("Enter the value of n: ");
9         // int n=sc.nextInt();
10        // int sum=0;
11        // sum=(n+n)+(n*n*n)+(n*n*n*n)+(n*n*n*n*n);
12        // System.out.println("The result is:"+sum);
13
14        // CODE 2:
15        System.out.println("Enter number of seconds:");
16        int totalesec=sc.nextInt();
17        //calculation of hours
18        int hours=totalesec/3600;
19        //calculating remaining seconds after extracting hours
20        int remainsec=totalesec%3600;
21        //calculation of minutes
22        int mins=remainsec/60;
23        //calculation of seconds remaining after extracting minutes
24        int secs=remainsec%60;
25        System.out.print("Equivalent time: "+hours+"hrs, "+mins+"mins, "+secs+"secs");
26    }
27 }
28 //21BCE4007
29 //Soumyojyoti Saha
```

Console: connection closed (Runnin... ✕  
Enter number of seconds:  
52400  
Equivalent time: 14hrs, 33mins, 20secs

**2.Total\_Seconds=72560**



The screenshot shows an IDE window titled 'Test.java' with the following Java code:

```
1 import java.util.Scanner;
2 public class Test
3 {
4     public static void main(String args[])
5     {
6         Scanner sc=new Scanner(System.in);
7         // CODE 1:
8         // System.out.println("Enter the value of n: ");
9         // int n=sc.nextInt();
10        // int sum=0;
11        // sum=(n+n)+(n*n*n)+(n*n*n*n)+(n*n*n*n*n);
12        // System.out.println("The result is:"+sum);
13
14        // CODE 2:
15        System.out.println("Enter number of seconds:");
16        int totalsec=sc.nextInt();
17        //calculation of hours
18        int hours=totalsec/3600;
19        //calculating remaining seconds after extracting hours
20        int remainsec=totalsec%3600;
21        //calculation of minutes
22        int mins=remainsec/60;
23        //calculation of seconds remaining after extracting minutes
24        int secs=remainsec%60;
25        System.out.print("Equivalent time: "+hours+"hrs, "+mins+"mins, "+secs+"secs");
26    }
27 }
28 //21BCE4007
29 //Soumyojyoti Saha
```

Below the code editor is a console window titled 'Console: connection closed (Runnin...'. It displays the following output:

```
Enter number of seconds:
72560
Equivalent time: 20hrs, 9mins, 20secs
```

END

