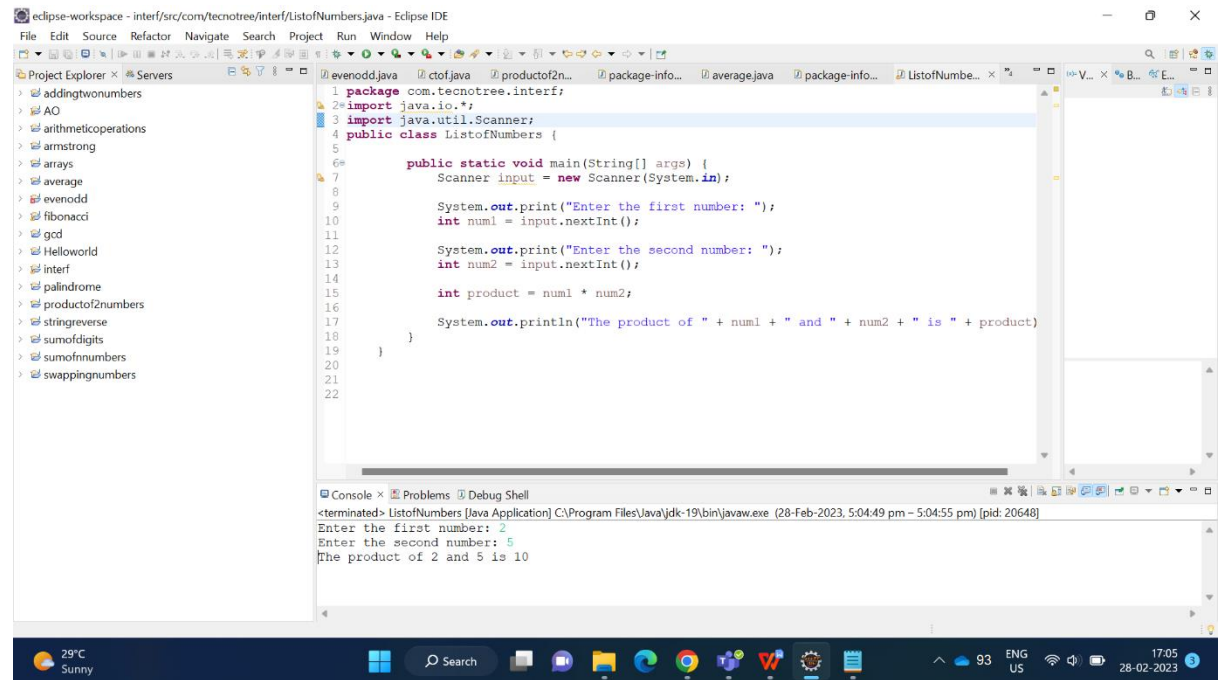


Java Assignment-1

Topic: Basic Syntax and Data Types

1. Write a Java program to print the product of two numbers.



```
1 package com.tecnotee.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6     public static void main(String[] args) {
7         Scanner input = new Scanner(System.in);
8
9         System.out.print("Enter the first number: ");
10        int num1 = input.nextInt();
11
12        System.out.print("Enter the second number: ");
13        int num2 = input.nextInt();
14
15        int product = num1 * num2;
16
17        System.out.println("The product of " + num1 + " and " + num2 + " is " + product)
18    }
19
20
21
22 }
```

Console Output:

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:04:49 pm - 5:04:55 pm) [pid: 20648]
Enter the first number: 2
Enter the second number: 5
The product of 2 and 5 is 10
```

CODESHARE LINK: <https://codeshare.io/8pLLXe>

2. Write a Java program to calculate the average of three numbers.

The screenshot shows the Eclipse IDE with a project named 'interf'. The 'Project Explorer' on the left lists several packages, including 'evenodd'. The main editor displays the file 'ListofNumbers.java' with the following code:

```
1 package com.tecnotree.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6
7     public static void main(String[] args) {
8
9         Scanner input = new Scanner(System.in);
10        System.out.println("Enter three numbers: ");
11
12        double num1 = input.nextDouble();
13        double num2 = input.nextDouble();
14        double num3 = input.nextDouble();
15
16        double average = (num1 + num2 + num3) / 3;
17
18        System.out.println("The average of " + num1 + ", " + num2 + ", and " + num3 + " is: " + average);
19    }
20 }
21
22
23
```

The 'Console' at the bottom shows the output of the program:

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:06:57 pm - 5:07:04 pm) [pid: 19068]
Enter three numbers:
3 4 5
The average of 3.0, 4.0, and 5.0 is 4.0
```

CODESHARE LINK: <https://codeshare.io/78mLZo>

3. Write a Java program to check whether a given number is even or odd.

The screenshot shows the Eclipse IDE with the same project 'interf'. The main editor displays the file 'ListofNumbers.java' with the following code:

```
1 package com.tecnotree.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6
7     public static void main(String[] args) {
8
9         Scanner input = new Scanner(System.in);
10        System.out.print("Enter a number: ");
11
12        int num = input.nextInt();
13
14        if (num % 2 == 0) {
15            System.out.println(num + " is even.");
16        } else {
17            System.out.println(num + " is odd.");
18        }
19    }
20 }
21
```

The 'Console' at the bottom shows the output of the program:

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:10:35 pm - 5:10:39 pm) [pid: 20692]
Enter a number: 3
3 is odd.
```

CODESHARE LINK: <https://codeshare.io/8pLL7e>

4. Write a Java program to check whether a given year is a leap year.

```
1 package com.tecnotee.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6     public static void main(String[] args){
7         int year;
8         System.out.println("Enter an Year :: ");
9         Scanner sc = new Scanner(System.in);
10        year = sc.nextInt();
11
12        if ((year % 4 == 0) && (year % 100 != 0) || (year % 400 == 0))
13            System.out.println("Specified year is a leap year");
14        else
15            System.out.println("Specified year is not a leap year");
16    }
17 }
```

Console > Problems > Debug Shell

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:14:45 pm - 5:14:52 pm) [pid: 368]
Enter an Year ::
2000
Specified year is a leap year
```

CODESHARE LINK: <https://codeshare.io/PdE3XX>

5. Write a Java program to print the ASCII value of a given character.

```
1 package com.tecnotee.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6     public static void main(String[] args)
7     {
8         // character whose ASCII value to be found
9         char ch1 = 'a';
10        char ch2 = 'b';
11        // variable that stores the integer value of the character
12        int asciivalue1 = ch1;
13        int asciivalue2 = ch2;
14        System.out.println("The ASCII value of " + ch1 + " is: " + asciivalue1);
15        System.out.println("The ASCII value of " + ch2 + " is: " + asciivalue2);
16    }
17 }
```

Console > Problems > Debug Shell

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:16:18 pm - 5:16:19 pm) [pid: 16072]
The ASCII value of a is: 97
The ASCII value of b is: 98
```

CODESHARE LINK: <https://codeshare.io/YLE4bR>

6. Write a Java program to convert Celsius to Fahrenheit.

The screenshot shows the Eclipse IDE with a project named 'interf'. The 'Project Explorer' on the left lists several Java files, including 'ListofNumbers.java'. The 'ListofNumbers.java' file is open in the editor, showing the following code:

```
1 package com.tecnotee.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6     public static void main(String[] args)
7     {
8         // initialising
9         double celsius = 10.0, fahrenheit = 0.0;
10
11         // formula for conversion
12         fahrenheit = (celsius * 1.8) + 32;
13         System.out.println(
14             "value of temperature in fahrenheit:"
15             + fahrenheit);
16     }
17 }
18
```

The 'Console' at the bottom shows the output of the program:

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:18:22 pm - 5:18:23 pm) [pid: 19488]
value of temperature in fahrenheit:50.0
```

CODESHARE LINK: <https://codeshare.io/j0dx8K>

7. Write a Java program to find the maximum of two numbers.

The screenshot shows the Eclipse IDE with a project named 'interf'. The 'Project Explorer' on the left lists several Java files, including 'ListofNumbers.java'. The 'ListofNumbers.java' file is open in the editor, showing the following code:

```
1 package com.tecnotee.interf;
2 import java.io.*;
3 import java.util.Scanner;
4 public class ListofNumbers {
5
6     public static void main(String args[])
7     {
8         double a = 12.123;
9         double b = 12.456;
10
11         // prints the maximum of two numbers
12         System.out.println(Math.max(a, b));
13     }
14 }

```

The 'Console' at the bottom shows the output of the program:

```
<terminated> ListofNumbers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 5:21:19 pm - 5:21:20 pm) [pid: 20172]
12.456
```

CODESHARE LINK: <https://codeshare.io/VZE4j3>