

Lesson 01 Demo 02

Implementing Data Types in Java

Objective: To Implement the Data Types in Java program

Tools required: Eclipse IDE

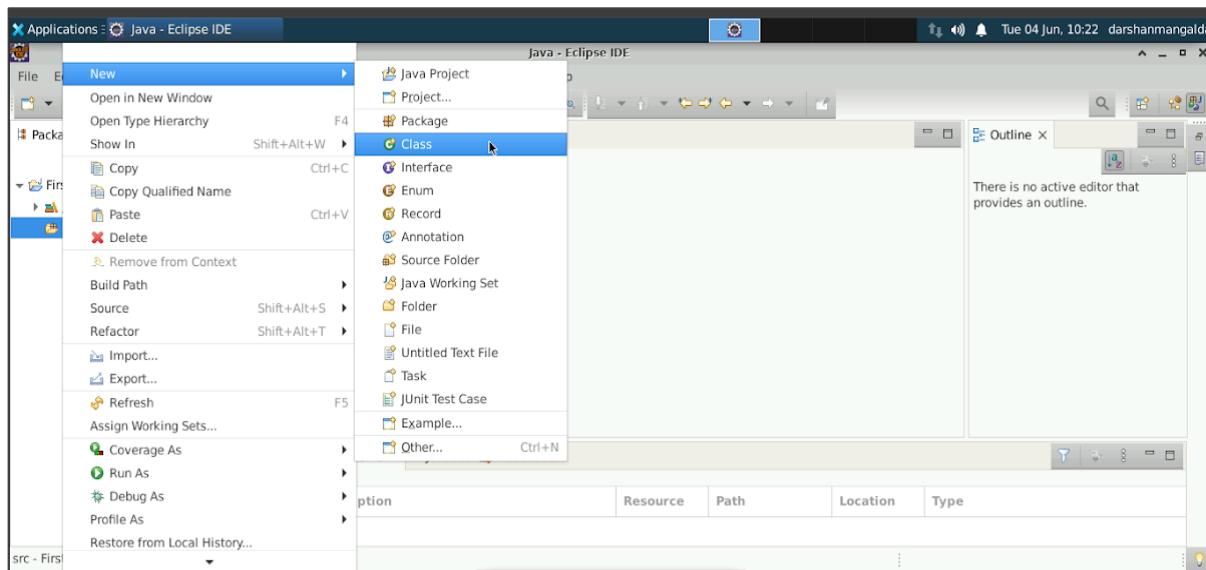
Prerequisites: None

Steps to be followed:

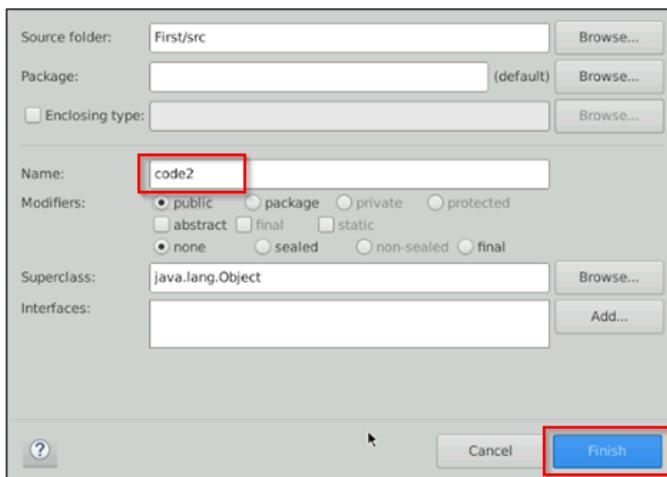
1. Create a new class on the Eclipse IDE
2. Create the program to implement Data Types in Java

Step 1: Create a folder on the Eclipse IDE

1.1 Right Src folder, select **New**, and click on the **Class** option



1.7 Enter the name in the Java class as **code2**, make sure the public option is checked and click on **Finish** Button



Step 2: Create the program to implement Data Types in Java

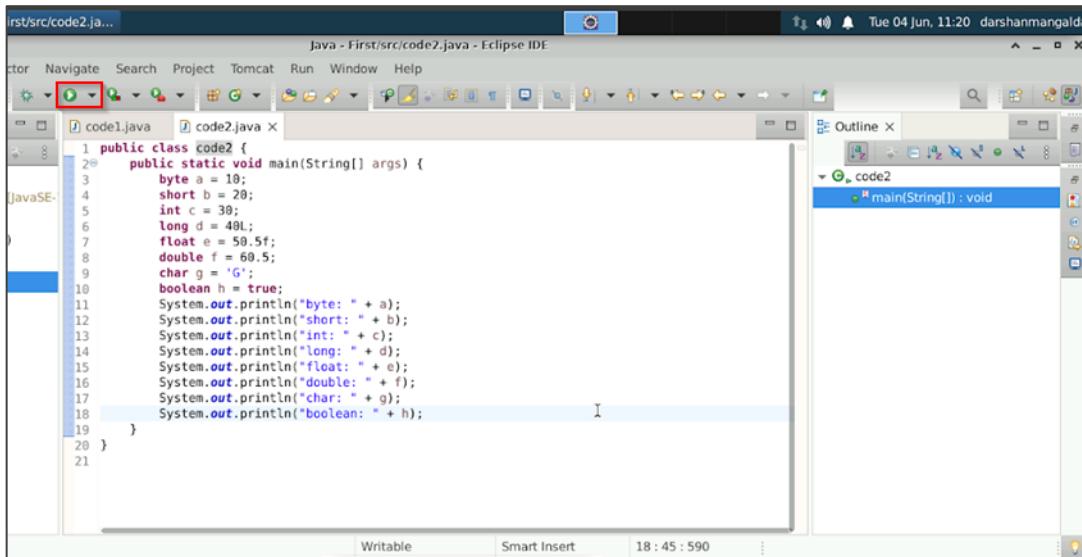
2.1 Enter the code for the implementation of the primitive data type as shown below:

```

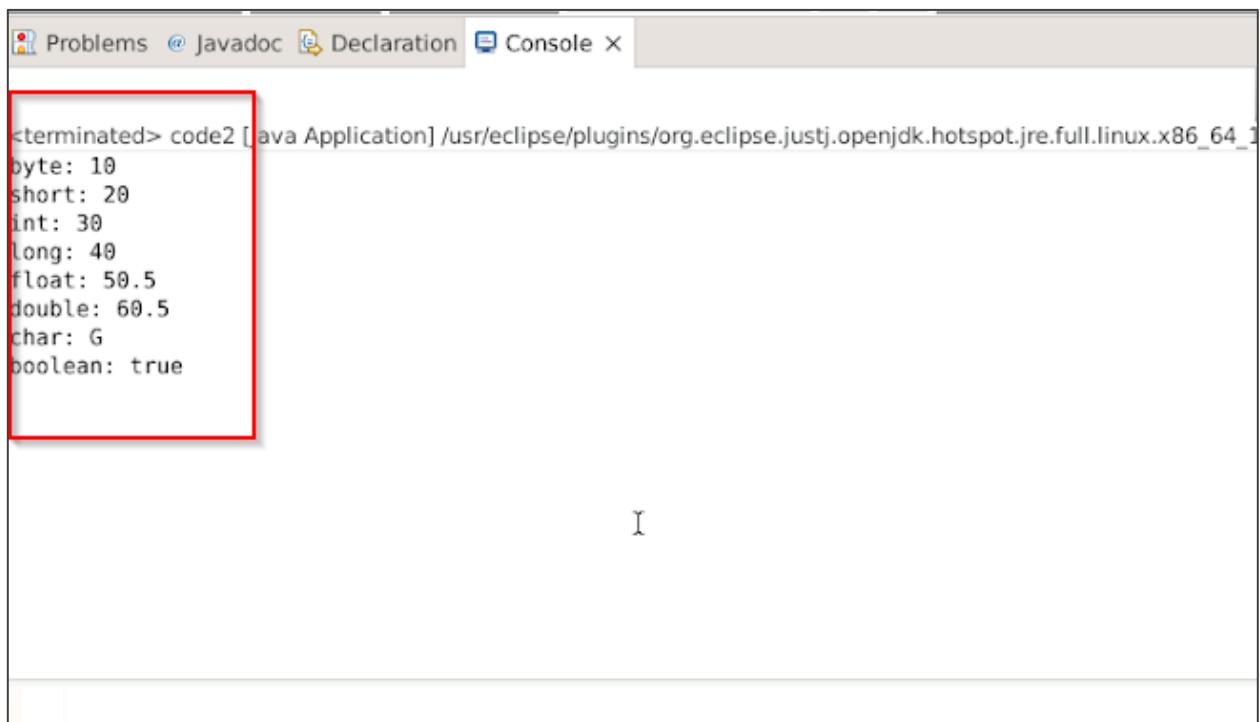
1 public class code2 {
2     public static void main(String[] args) {
3         byte a = 10;
4         short b = 28;
5         int c = 38;
6         long d = 40L;
7         float e = 50.5f;
8         double f = 60.5;
9         char g = 'G';
10        boolean h = true;
11        System.out.println("byte: " + a);
12        System.out.println("short: " + b);
13        System.out.println("int: " + c);
14        System.out.println("long: " + d);
15        System.out.println("float: " + e);
16        System.out.println("double: " + f);
17        System.out.println("char: " + g);
18        System.out.println("boolean: " + h);
19    }
20 }

```

2.2 Click on the Run Button to execute the code



The output of the code will be as below:



2.3 Enter the code for the implementation of the non-primitive data type

The screenshot shows the Eclipse IDE interface with the title bar "Java - First/src/nonprimitive.java - Eclipse IDE". The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Tomcat, Run, Window, Help. The toolbar has various icons for file operations. The left sidebar shows projects "First" and "src" containing files "code1.java", "code2.java", "code3.java", "code4.java", and "nonprimitive.java". The main editor window displays the following Java code:

```

import java.util.ArrayList;
public class nonprimitive {
    public static void main(String[] args) {
        String message = "Hello, World!";
        int[] numbers = {1, 2, 3};
        ArrayList<String> names = new ArrayList<>();
        names.add("John");
        names.add("Jane");
        System.out.println("Message: " + message + ", Numbers: " + java.util.Arrays.toString(numbers));
    }
}

```

The status bar at the bottom indicates "Writable" and the time "13 : 1 : 431".

The output of the Data Types in Java can be seen in the Console field as shown below:

The screenshot shows the Eclipse IDE interface with the title bar "Java - First/src/nonprimitive.java - Eclipse IDE". The menu bar and toolbar are identical to the previous screenshot. The left sidebar shows the "Package Explorer" with the "src" folder selected, displaying files "code1.java", "code2.java", "code3.java", "code4.java", and "nonprimitive.java". The "Console" tab is active, showing the output of the program:

```

terminated: nonprimitive [java Application] /usr/eclipse/jeejeev3/org.eclipse.jdt.core/openjdk.hotspot.jre.full.linux.x86_64_17.0.1.v20211116-1657/jre/bin/java (Jun 4, 2021)
Message: Hello, World!, Numbers: [1, 2, 3], Names: [John, Jane]

```

A red box highlights the output text in the console. The status bar at the bottom indicates "Writable" and the time "Tue 04 Jun, 11:35 darshanmangaldas".

By following the above steps, you have successfully Implemented the Data Types in Java