

Name: _____ Date: ___/___/___ Period: ____

Objective: The student will be able to write a simple program to perform basic arithmetic operations.

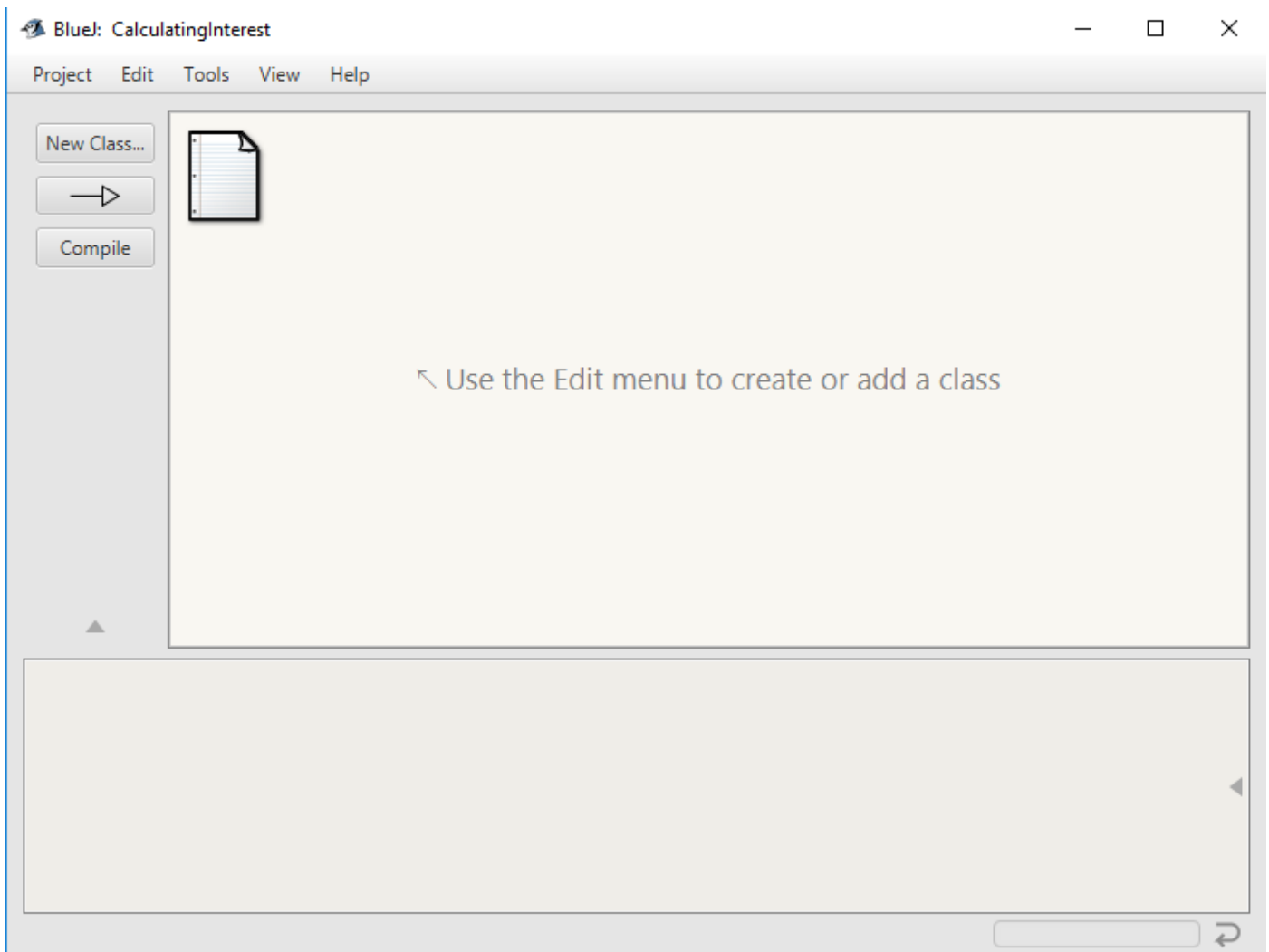
Directions: Perform the following steps.

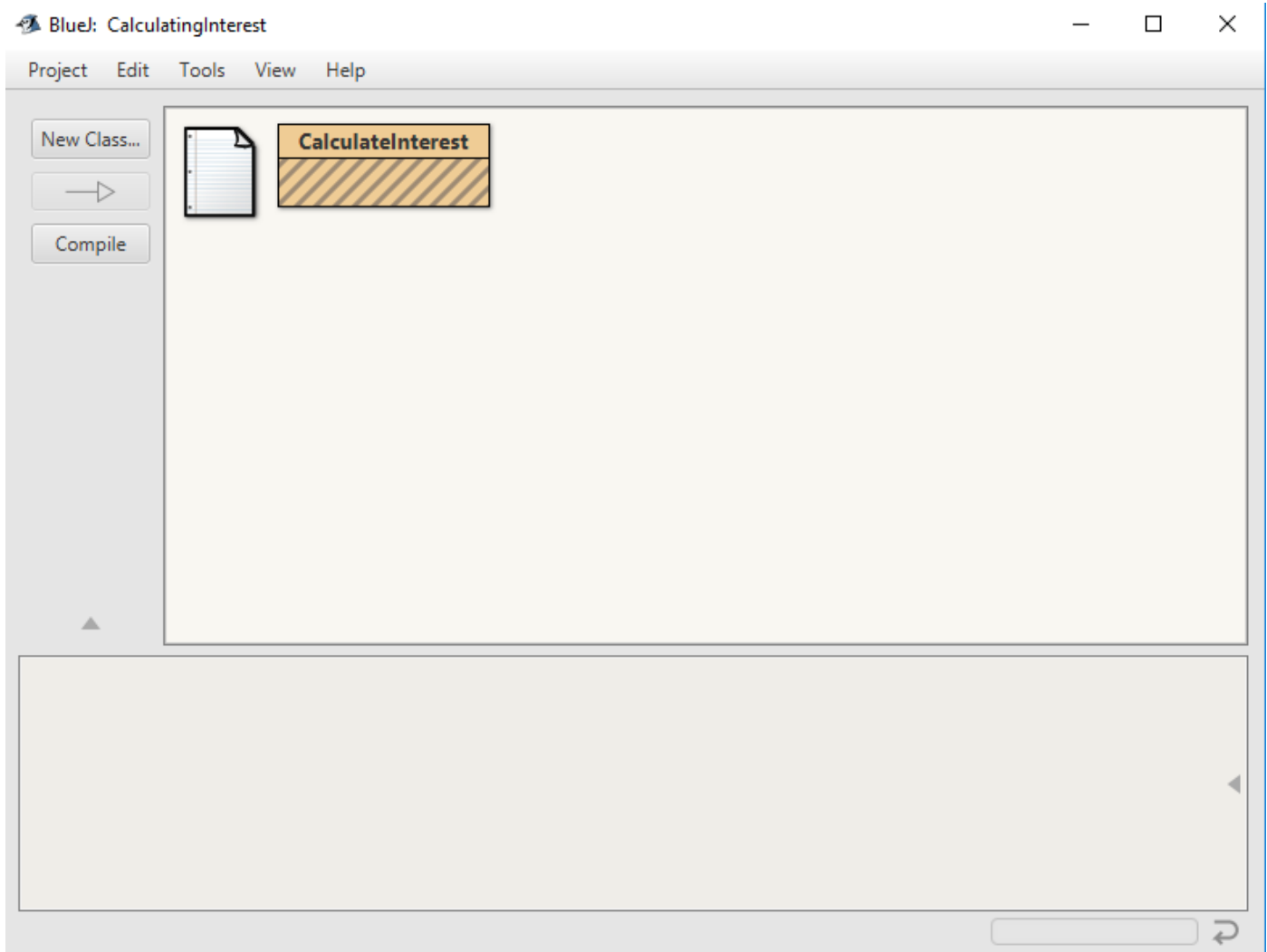
Step 1: Start BlueJ.

Step 2: Click on New Project.

Step 3: Enter a Project Name. In this case CalculateInterest. The project name and the class name will be the same so the first letter should be a capital letter.

Step 4: Click on New Class and enter CalculateInterest.





Step 5: Double click on the CalculateInterest box to start the editor.

Step 6: Press Control-A to select all text in the editor screen. Press the Backspace key to remove this text.

Step 7: Enter the program code shown. When declaring public class CalculateInterest do not press the backspace key after entering the closing brace “}”, this will lock the editor. Once you put in the closing brace and hit the enter key you can go back and edit any errors without any problems. (It is a program bug with Blue).

```
import java.util.Scanner;
// Program to Calculate Interest

// This program implements a simple program that will compute
// the amount of interest that is earned on an investment over
// a period of one year. The initial amount of the investment
```

```
// and the interest rate are input by the user. The value of
// the investment at the end of the year is output. The rate
// must be input as a decimal, not a percentage.

// Mr. Ellsworth Period: 0 November 8, 2017

public class CalculateInterest
{
    public static void main(String[] args)
    {
        // Declare Variables

        double principal;    // the value of the investment
        double rate;        // the annual interest rate
        double interest;    // the interest earned during the year

        Scanner sc = new Scanner(System.in); // Initializing scanner object

        // Input Section

        System.out.print("Enter the initial investment: ");
        principal = sc.nextDouble();

        System.out.print("Enter the annual interest rate (as decimal): ");
        rate = sc.nextDouble();

        // Processing Section

        interest = principal * rate;
        principal = principal + interest;

        // Output Section
```

```
System.out.printf("The amount of interest is $%1.2f%n", interest);  
System.out.printf("The value after one year is $%1.2f%n", principal);
```

```
// Ending the Scanner Object
```

```
sc.close();
```

```
} // end of main
```

```
} // end of class CalculateInterest
```

Step 8: Click on the Compile button and the program will be compiled. If there are any errors correct the errors and compile the program again.

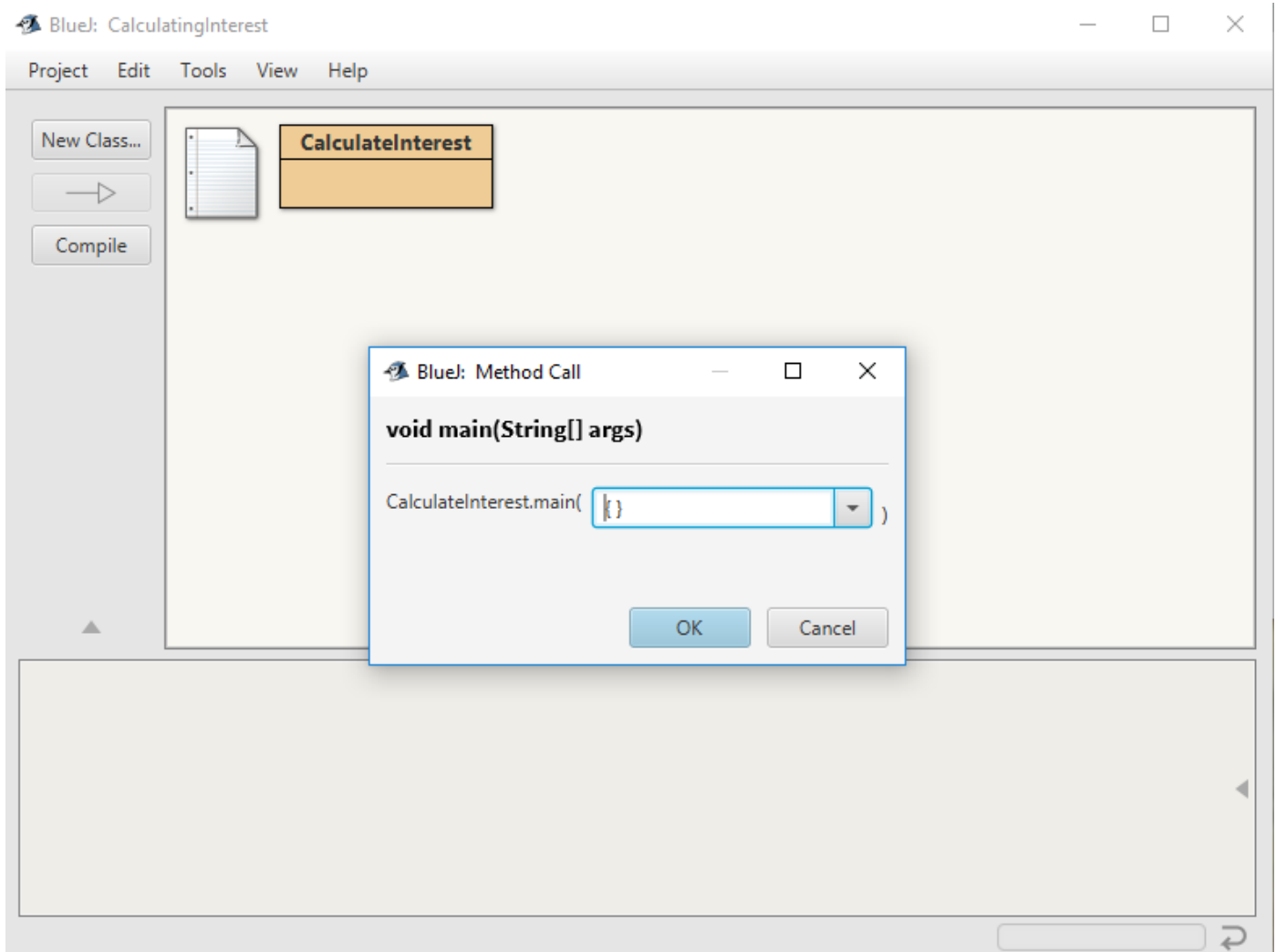
Step 9: Minimize the editor by click on the “_” button in the upper right hand corner of the screen.

Step 10: Right click on the EnumDemo box and a drop down menu will appear.

Step 11: Click on void main(String[] args) to start the program.

Step 12: Click on the OK button to run the program.

Step 13: A BlueJ Terminal Window will open and you will see the output displayed.



Output:

```
Blue: Terminal Window - CalculatingInterest
Options
Enter the initial investment: 25000
Enter the annual interest rate (as decimal): .05
The amount of interest is $1250.00
The value after one year is $26250.00
```