Section 1 – Exercise

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Level : 2

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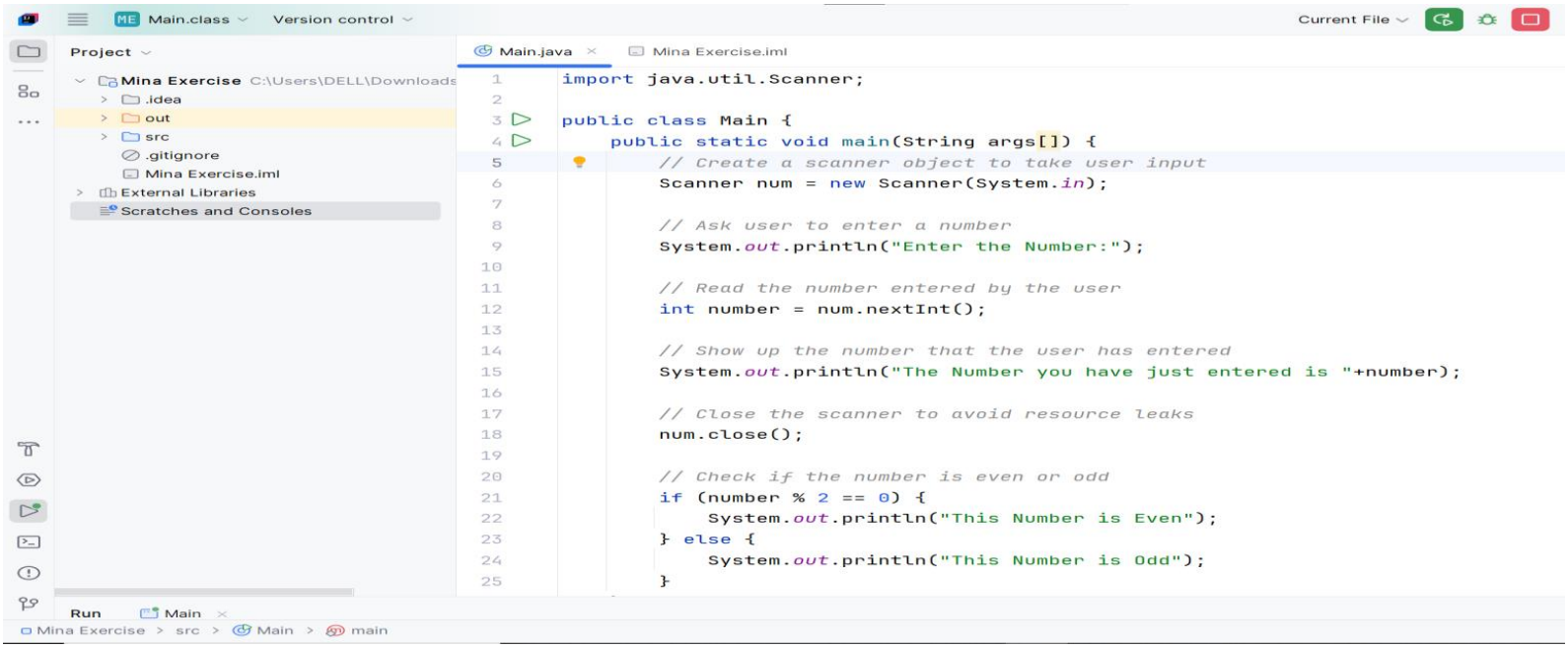
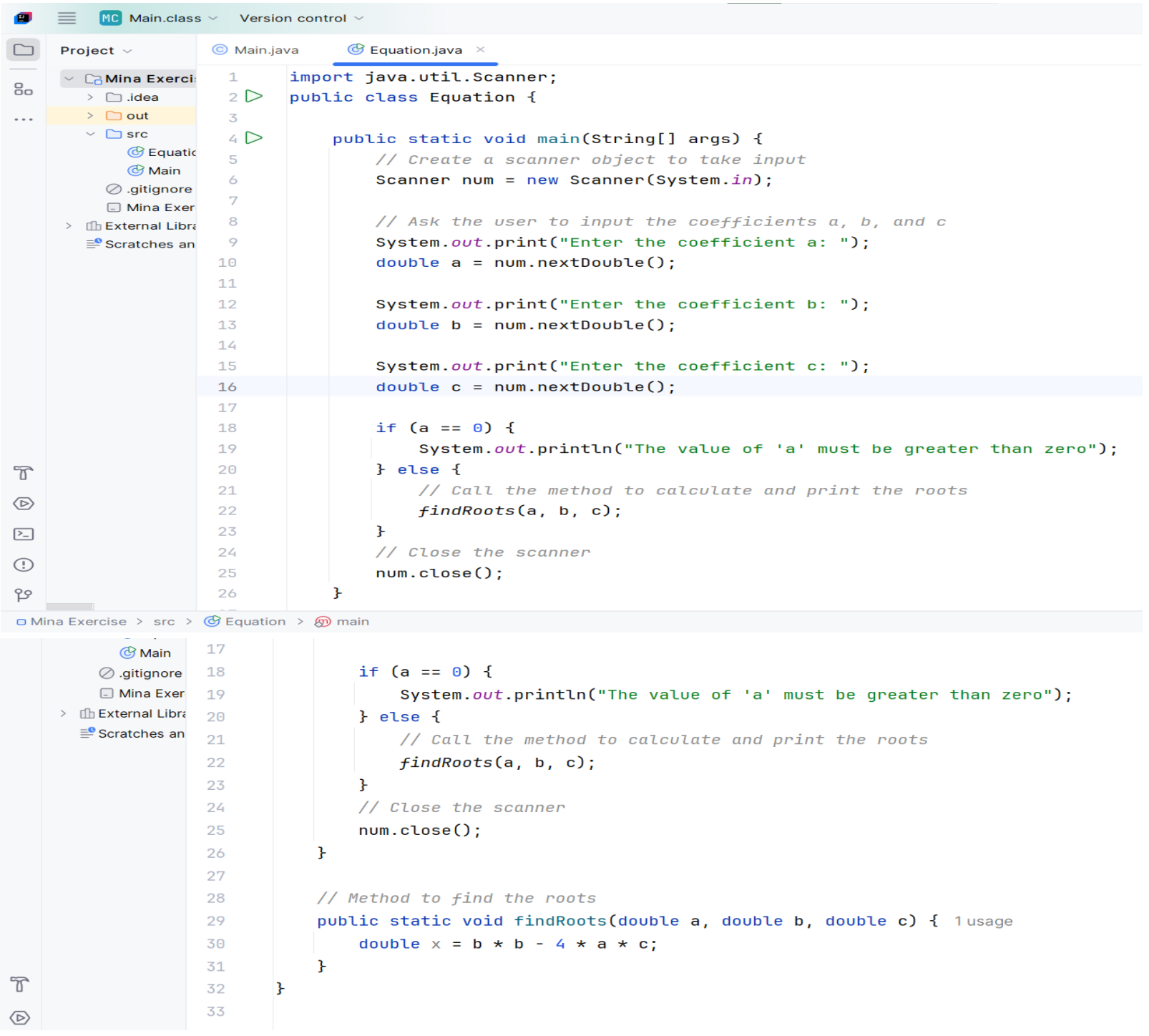
1. **Demonstrate the method by calling it in a program that ask the user to enter number and output if the number is odd or even.**



2. Demonstrate the method by calling it in a program that ask the user to enter a, b, c and print the roots of quadratic equation by using this formula :

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$




```java
import java.util.Scanner;
public class Equation {

    public static void main(String[] args) {
        // Create a scanner object to take input
        Scanner num = new Scanner(System.in);

        // Ask the user to input the coefficients a, b, and c
        System.out.print("Enter the coefficient a: ");
        double a = num.nextDouble();

        System.out.print("Enter the coefficient b: ");
        double b = num.nextDouble();

        System.out.print("Enter the coefficient c: ");
        double c = num.nextDouble();

        if (a == 0) {
            System.out.println("The value of 'a' must be greater than zero");
        } else {
            // Call the method to calculate and print the roots
            findRoots(a, b, c);
        }
        // Close the scanner
        num.close();
    }

    if (a == 0) {
        System.out.println("The value of 'a' must be greater than zero");
    } else {
        // Call the method to calculate and print the roots
        findRoots(a, b, c);
    }
    // Close the scanner
    num.close();
}

// Method to find the roots
public static void findRoots(double a, double b, double c) {  1 usage
    double x = b * b - 4 * a * c;
}
}
```