

```
Import java.util.Scanner;
```

```
Public class Calculator {
```

```
    Public static void main(String[] args) {
```

```
        Scanner scanner = new Scanner(System.in);
```

```
        System.out.print("Enter the first number: ");
```

```
        Double num1 = scanner.nextDouble();
```

```
        System.out.print("Enter the second number: ");
```

```
        Double num2 = scanner.nextDouble();
```

```
        System.out.println("Select operation:");
```

```
        System.out.println("1. Addition");
```

```
        System.out.println("2. Subtraction");
```

```
        System.out.println("3. Multiplication");
```

```
        System.out.println("4. Division");
```

```
        System.out.print("Enter choice (1-4): ");
```

```
        Int choice = scanner.nextInt();
```

```
        Double result = 0;
```

```
        Switch (choice) {
```

```
            Case 1:
```

```
                Result = num1 + num2;
```

```
                Break;
```

```
            Case 2:
```

```
Result = num1 – num2;
```

```
Break;
```

Case 3:

```
Result = num1 * num2;
```

```
Break;
```

Case 4:

```
If (num2 != 0) {
```

```
    Result = num1 / num2;
```

```
} else {
```

```
    System.out.println("Error: Cannot divide by zero.");
```

```
    Return;
```

```
}
```

```
Break;
```

Default:

```
System.out.println("Invalid choice. Please enter a number between 1 and 4.");
```

```
Return;
```

```
}
```

```
System.out.println("Result: " + result);
```

```
}
```

```
}
```

Number Guessing Game

```
Import java.util.Random;
```

```
Import java.util.Scanner;
```

```

Public class NumberGuessingGame {

    Public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        Random random = new Random();

        Int lowerBound = 1;

        Int upperBound = 100;

        Int randomNumber = random.nextInt(upperBound – lowerBound + 1) + lowerBound;

        Int userGuess;

        Int attempts = 0;

        System.out.println("Welcome to the Number Guessing Game!");

        System.out.println("I have selected a random number between “ + lowerBound + “ and “ +
upperBound + “. Try to guess it.");

        Do {

            System.out.print("Enter your guess: ");

            userGuess = scanner.nextInt();

            attempts++;

            if (userGuess < randomNumber) {

                System.out.println("Too low! Try again.");

            } else if (userGuess > randomNumber) {

                System.out.println("Too high! Try again.");

            } else {

                System.out.println("Congratulations! You guessed the correct number in “ + attempts + “
attempts.");

            }

        }
    }
}

```

```
    } while (userGuess != randomNumber);
```

```
    Scanner.close();
```

```
    }
```

```
}
```