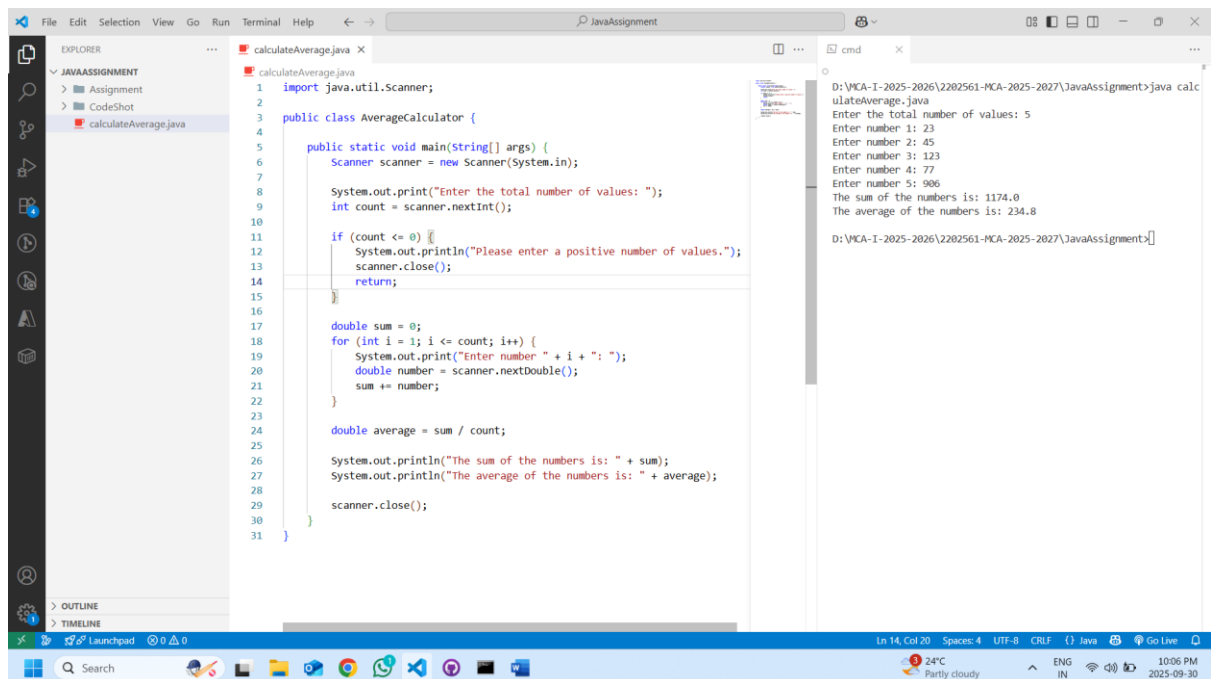


## 1. Get Input from the User and calculate average



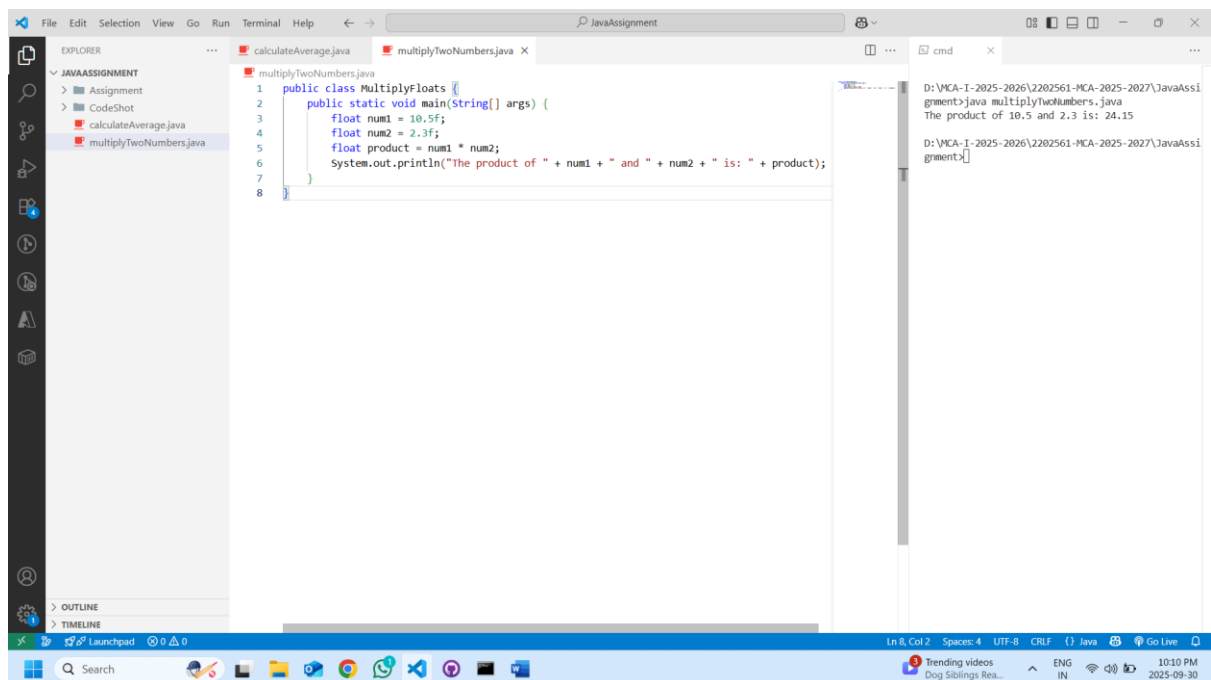
The screenshot shows an IDE with a file explorer on the left, a code editor in the center, and a terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with subfolders 'Assignment' and 'CodeShot'. The code editor displays the file 'calculateAverage.java' with the following code:

```
1 import java.util.Scanner;
2
3 public class AverageCalculator {
4
5     public static void main(String[] args) {
6         Scanner scanner = new Scanner(System.in);
7
8         System.out.print("Enter the total number of values: ");
9         int count = scanner.nextInt();
10
11         if (count <= 0) {
12             System.out.println("Please enter a positive number of values.");
13             scanner.close();
14             return;
15         }
16
17         double sum = 0;
18         for (int i = 1; i <= count; i++) {
19             System.out.print("Enter number " + i + ": ");
20             double number = scanner.nextDouble();
21             sum += number;
22         }
23
24         double average = sum / count;
25
26         System.out.println("The sum of the numbers is: " + sum);
27         System.out.println("The average of the numbers is: " + average);
28         scanner.close();
29     }
30 }
31
```

The terminal on the right shows the output of the program:

```
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java calculateAverage.java
Enter the total number of values: 5
Enter number 1: 23
Enter number 2: 45
Enter number 3: 123
Enter number 4: 77
Enter number 5: 906
The sum of the numbers is: 1174.0
The average of the numbers is: 234.8
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```

## 2. Multiply Two Floating-Point Numbers



The screenshot shows an IDE with a file explorer on the left, a code editor in the center, and a terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with subfolders 'Assignment' and 'CodeShot'. The code editor displays the file 'multiplyTwoNumbers.java' with the following code:

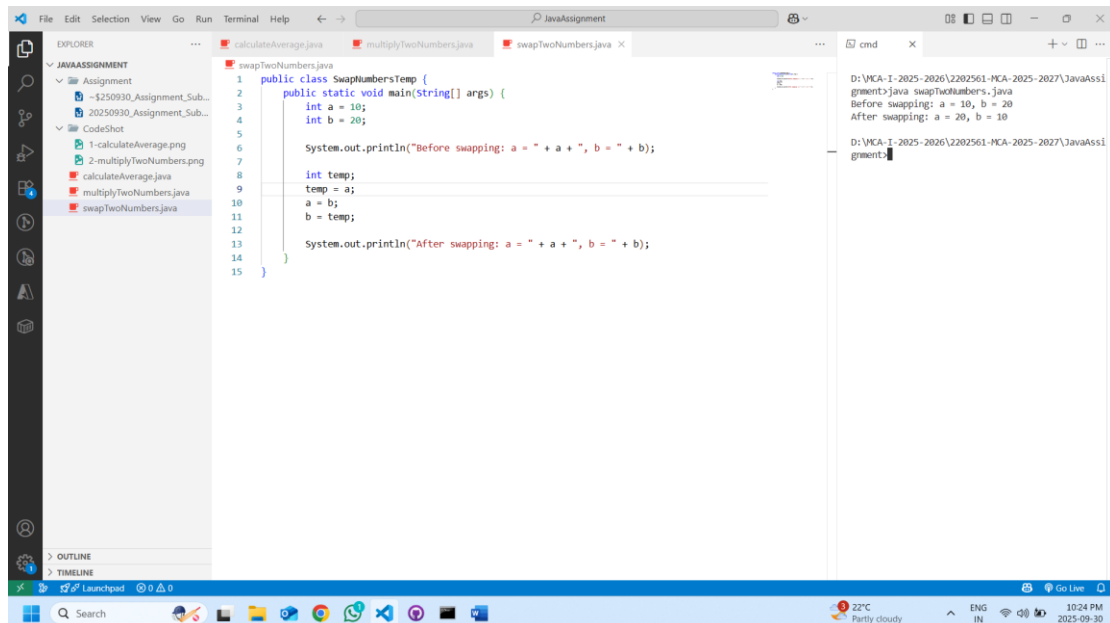
```
1 public class MultiplyFloats {
2     public static void main(String[] args) {
3         float num1 = 10.5f;
4         float num2 = 2.3f;
5         float product = num1 * num2;
6         System.out.println("The product of " + num1 + " and " + num2 + " is: " + product);
7     }
8 }

```

The terminal on the right shows the output of the program:

```
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java multiplyTwoNumbers.java
The product of 10.5 and 2.3 is: 24.15
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```

### 3. Swap Two Numbers



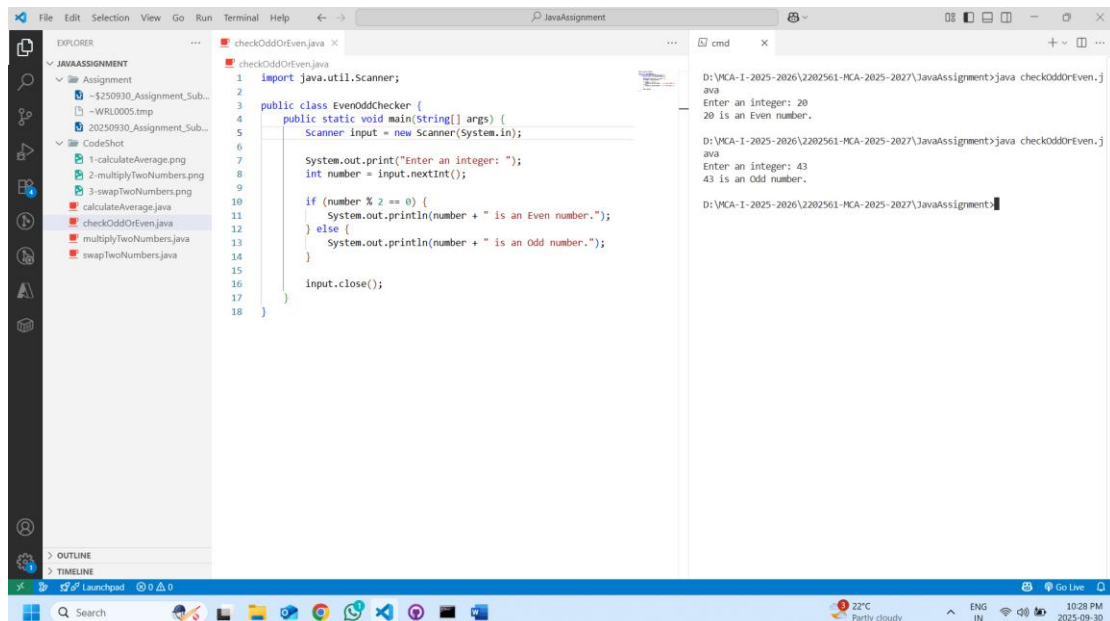
The screenshot shows an IDE with the file explorer on the left, the editor in the center, and the terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with a folder 'Assignment' containing several files. The editor displays the code for 'swapTwoNumbers.java'. The terminal shows the command to run the program and its output.

```
1 public class SwapNumbersTemp {
2     public static void main(String[] args) {
3         int a = 10;
4         int b = 20;
5
6         System.out.println("Before swapping: a = " + a + ", b = " + b);
7
8         int temp;
9         temp = a;
10        a = b;
11        b = temp;
12
13        System.out.println("After swapping: a = " + a + ", b = " + b);
14    }
15 }
```

Terminal output:

```
D:\MCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssi
gment>java swapTwoNumbers.java
Before swapping: a = 10, b = 20
After swapping: a = 20, b = 10
D:\MCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssi
gment>
```

### 4. Check Even or Odd Integers



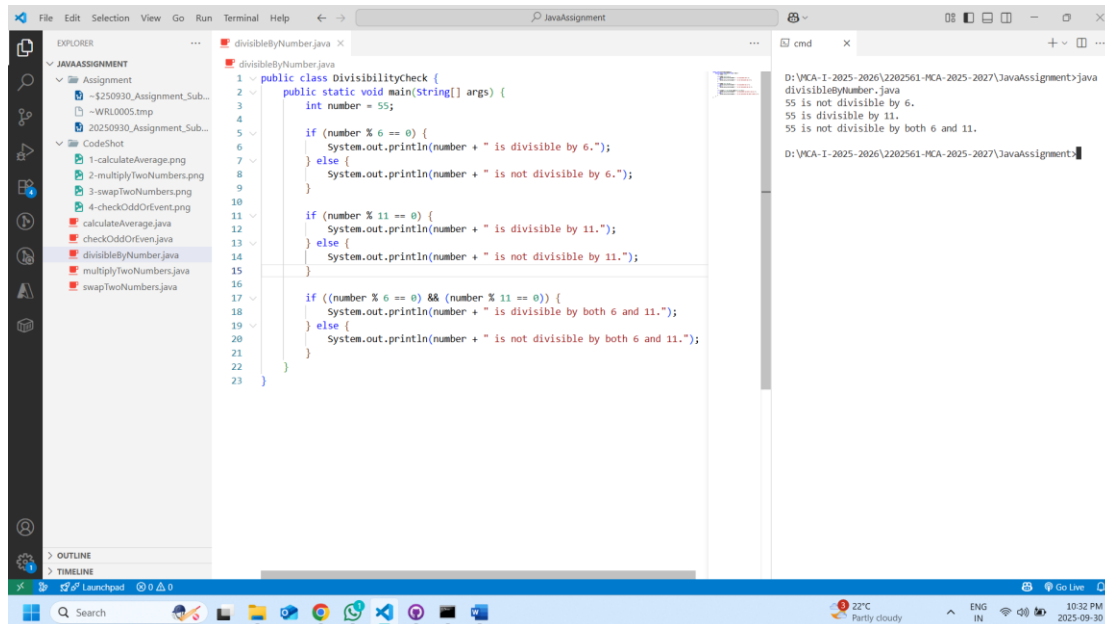
The screenshot shows an IDE with the file explorer on the left, the editor in the center, and the terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with a folder 'Assignment' containing several files. The editor displays the code for 'checkOddOrEven.java'. The terminal shows the command to run the program and its output for two different inputs.

```
1 import java.util.Scanner;
2
3 public class EvenOddChecker {
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6
7         System.out.print("Enter an integer: ");
8         int number = input.nextInt();
9
10        if (number % 2 == 0) {
11            System.out.println(number + " is an Even number.");
12        } else {
13            System.out.println(number + " is an Odd number.");
14        }
15
16        input.close();
17    }
18 }
```

Terminal output:

```
D:\MCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssi
gment>java checkOddOrEven.j
ava
Enter an integer: 20
20 is an Even number.
D:\MCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssi
gment>java checkOddOrEven.j
ava
Enter an integer: 43
43 is an Odd number.
D:\MCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssi
gment>
```

## 5. Check no, is divisible by 6,11 (e. g. no = 55)



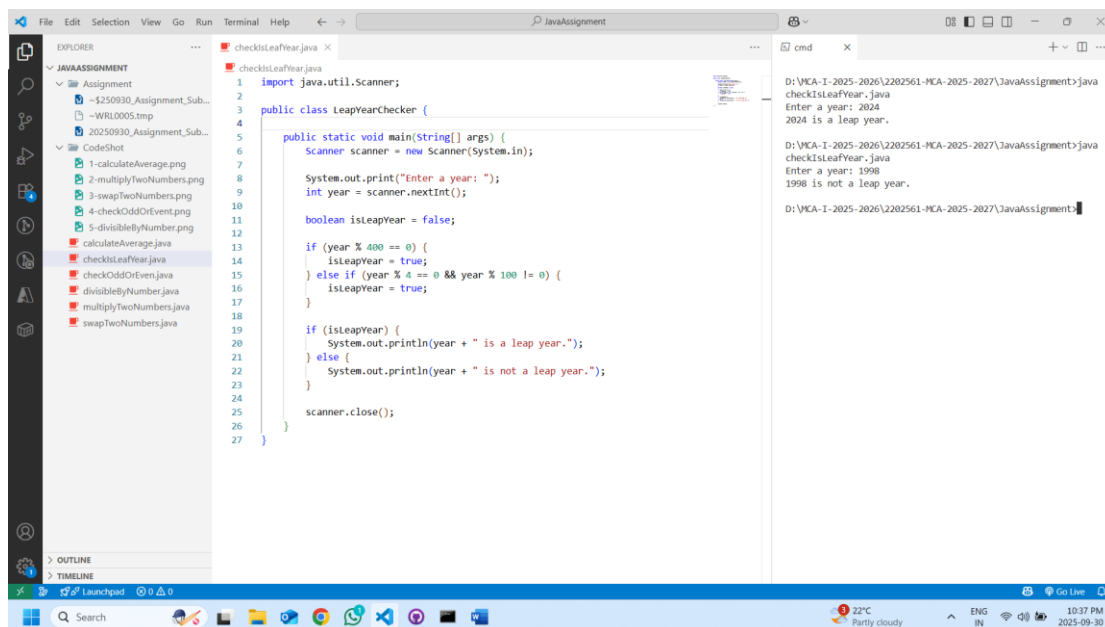
The screenshot shows an IDE with a file explorer on the left, a code editor in the center, and a terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with a sub-project 'Assignment' containing several files. The code editor shows a Java file named 'divisibilityNumber.java' with the following code:

```
1 public class DivisibilityCheck {
2     public static void main(String[] args) {
3         int number = 55;
4
5         if (number % 6 == 0) {
6             System.out.println(number + " is divisible by 6.");
7         } else {
8             System.out.println(number + " is not divisible by 6.");
9         }
10
11         if (number % 11 == 0) {
12             System.out.println(number + " is divisible by 11.");
13         } else {
14             System.out.println(number + " is not divisible by 11.");
15         }
16
17         if ((number % 6 == 0) && (number % 11 == 0)) {
18             System.out.println(number + " is divisible by both 6 and 11.");
19         } else {
20             System.out.println(number + " is not divisible by both 6 and 11.");
21         }
22     }
23 }
```

The terminal on the right shows the output of the program:

```
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java
divisibilityNumber.java
55 is not divisible by 6.
55 is divisible by 11.
55 is not divisible by both 6 and 11.
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```

## 6. Check given no. is leap year not.



The screenshot shows an IDE with a file explorer on the left, a code editor in the center, and a terminal on the right. The file explorer shows a project named 'JAVAASSIGNMENT' with a sub-project 'Assignment' containing several files. The code editor shows a Java file named 'checkIsLeapYear.java' with the following code:

```
1 import java.util.Scanner;
2
3 public class LeapYearChecker {
4
5     public static void main(String[] args) {
6         Scanner scanner = new Scanner(System.in);
7
8         System.out.print("Enter a year: ");
9         int year = scanner.nextInt();
10
11         boolean isLeapYear = false;
12
13         if (year % 400 == 0) {
14             isLeapYear = true;
15         } else if (year % 4 == 0 && year % 100 != 0) {
16             isLeapYear = true;
17         }
18
19         if (isLeapYear) {
20             System.out.println(year + " is a leap year.");
21         } else {
22             System.out.println(year + " is not a leap year.");
23         }
24
25         scanner.close();
26     }
27 }
```

The terminal on the right shows the output of the program for two different inputs:

```
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java
checkIsLeapYear.java
Enter a year: 2024
2024 is a leap year.
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java
checkIsLeapYear.java
Enter a year: 1998
1998 is not a leap year.
D:\VCA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```

## 7. Find Largest Among 3 Numbers

```
1 public class FindLargest {
2     public static void main(String[] args) {
3         int num1 = 10;
4         int num2 = 25;
5         int num3 = 15;
6
7         if (num1 >= num2 && num1 >= num3) {
8             System.out.println(num1 + " is the largest.");
9         } else if (num2 >= num1 && num2 >= num3) {
10            System.out.println(num2 + " is the largest.");
11        } else {
12            System.out.println(num3 + " is the largest.");
13        }
14    }
15 }
```

D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>java FindLargestNumber.java  
25 is the largest.

## 8. Calculate Simple Interest

```
1 import java.util.Scanner;
2
3 public class SimpleInterestCalculator {
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6
7         double principal;
8         double rate;
9         double time;
10        double simpleInterest;
11
12        System.out.print("Enter the Principal amount: ");
13        principal = input.nextDouble();
14
15        System.out.print("Enter the Rate of interest (as a percentage): ");
16        rate = input.nextDouble();
17
18        System.out.print("Enter the Time period (in years): ");
19        time = input.nextDouble();
20
21        simpleInterest = (principal * rate * time) / 100;
22
23        System.out.println("\nSimple Interest is: " + simpleInterest);
24
25        input.close();
26    }
27 }
```

D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>java SimpleInterest.java  
Enter the Principal amount: 5000  
Enter the Rate of interest (as a percentage): 6.50  
Enter the Time period (in years): 1  
Simple Interest is: 325.0

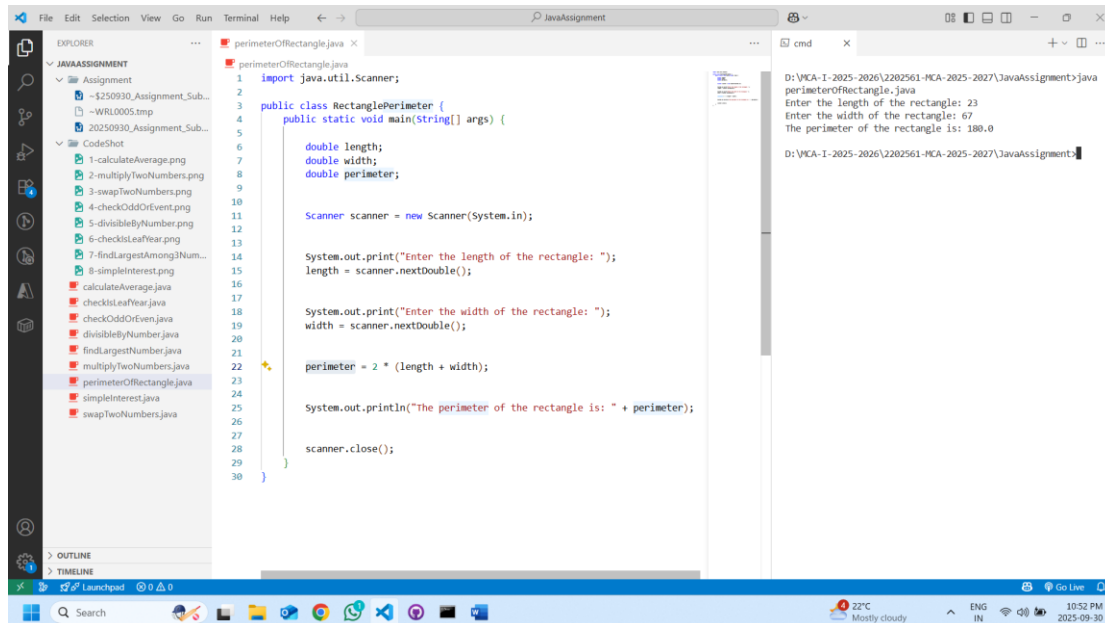
D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>java SimpleInterest.java  
Enter the Principal amount: 60000  
Enter the Rate of interest (as a percentage): 6.50  
Enter the Time period (in years): 1  
Simple Interest is: 3900.0

D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>java SimpleInterest.java  
Enter the Principal amount: 60000  
Enter the Rate of interest (as a percentage): 6.5  
Enter the Time period (in years): 1  
Simple Interest is: 3900.0

D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>java SimpleInterest.java  
Enter the Principal amount: 60000  
Enter the Rate of interest (as a percentage): 10  
Enter the Time period (in years): 1  
Simple Interest is: 6000.0

D:\VCA-I-2025-2026\2202561-PCA-2025-2027\JavaAssignment>

## 9. Find the Perimeter of a Rectangle



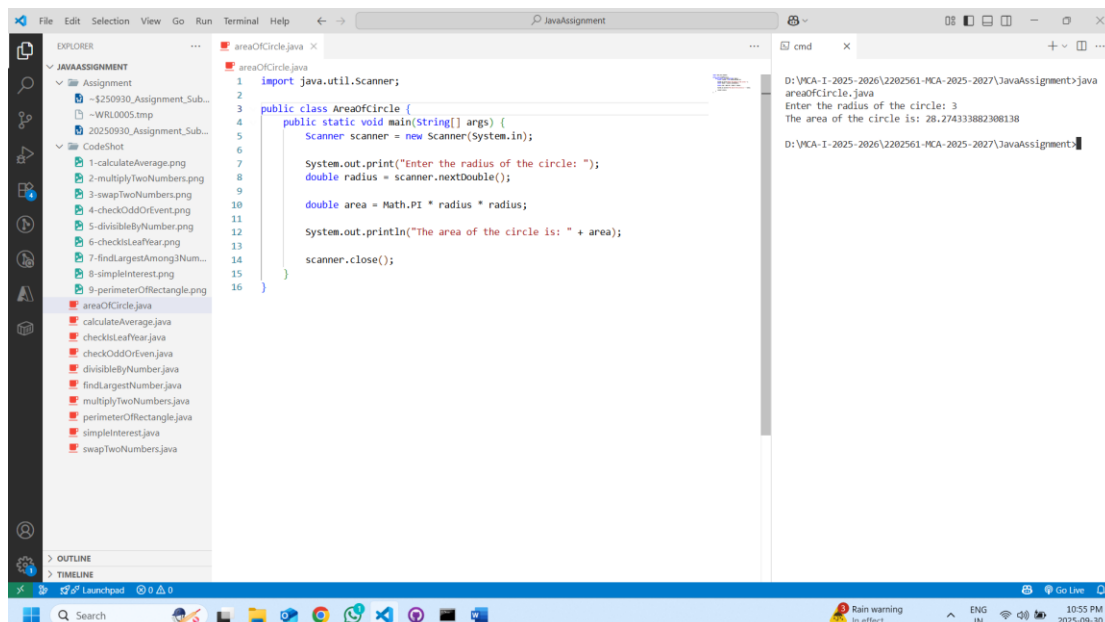
The screenshot shows an IDE with the following components:

- EXPLORER:** A list of files under the 'JAVAASSIGNMENT' folder. The file 'perimeterOfRectangle.java' is selected.
- Editor:** Displays the code for 'perimeterOfRectangle.java'. The code is as follows:

```
1 import java.util.Scanner;
2
3 public class RectanglePerimeter {
4     public static void main(String[] args) {
5
6         double length;
7         double width;
8         double perimeter;
9
10
11         Scanner scanner = new Scanner(System.in);
12
13         System.out.print("Enter the length of the rectangle: ");
14         length = scanner.nextDouble();
15
16
17         System.out.print("Enter the width of the rectangle: ");
18         width = scanner.nextDouble();
19
20
21         perimeter = 2 * (length + width);
22
23         System.out.println("The perimeter of the rectangle is: " + perimeter);
24
25         scanner.close();
26     }
27 }
28
29
30
```
- Terminal:** Shows the output of the program:

```
D:\VKA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java
perimeterOfRectangle.java
Enter the length of the rectangle: 23
Enter the width of the rectangle: 67
The perimeter of the rectangle is: 180.0
D:\VKA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```

## 10. Find area of circle



The screenshot shows an IDE with the following components:

- EXPLORER:** A list of files under the 'JAVAASSIGNMENT' folder. The file 'areaOfCircle.java' is selected.
- Editor:** Displays the code for 'areaOfCircle.java'. The code is as follows:

```
1 import java.util.Scanner;
2
3 public class AreaOfCircle {
4     public static void main(String[] args) {
5         Scanner scanner = new Scanner(System.in);
6
7         System.out.print("Enter the radius of the circle: ");
8         double radius = scanner.nextDouble();
9
10         double area = Math.PI * radius * radius;
11
12         System.out.println("The area of the circle is: " + area);
13
14         scanner.close();
15     }
16 }

```
- Terminal:** Shows the output of the program:

```
D:\VKA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>java
areaOfCircle.java
Enter the radius of the circle: 3
The area of the circle is: 28.274333882308138
D:\VKA-I-2025-2026\2202561-MCA-2025-2027\JavaAssignment>
```