



Assignment_6_qs_1.java ×

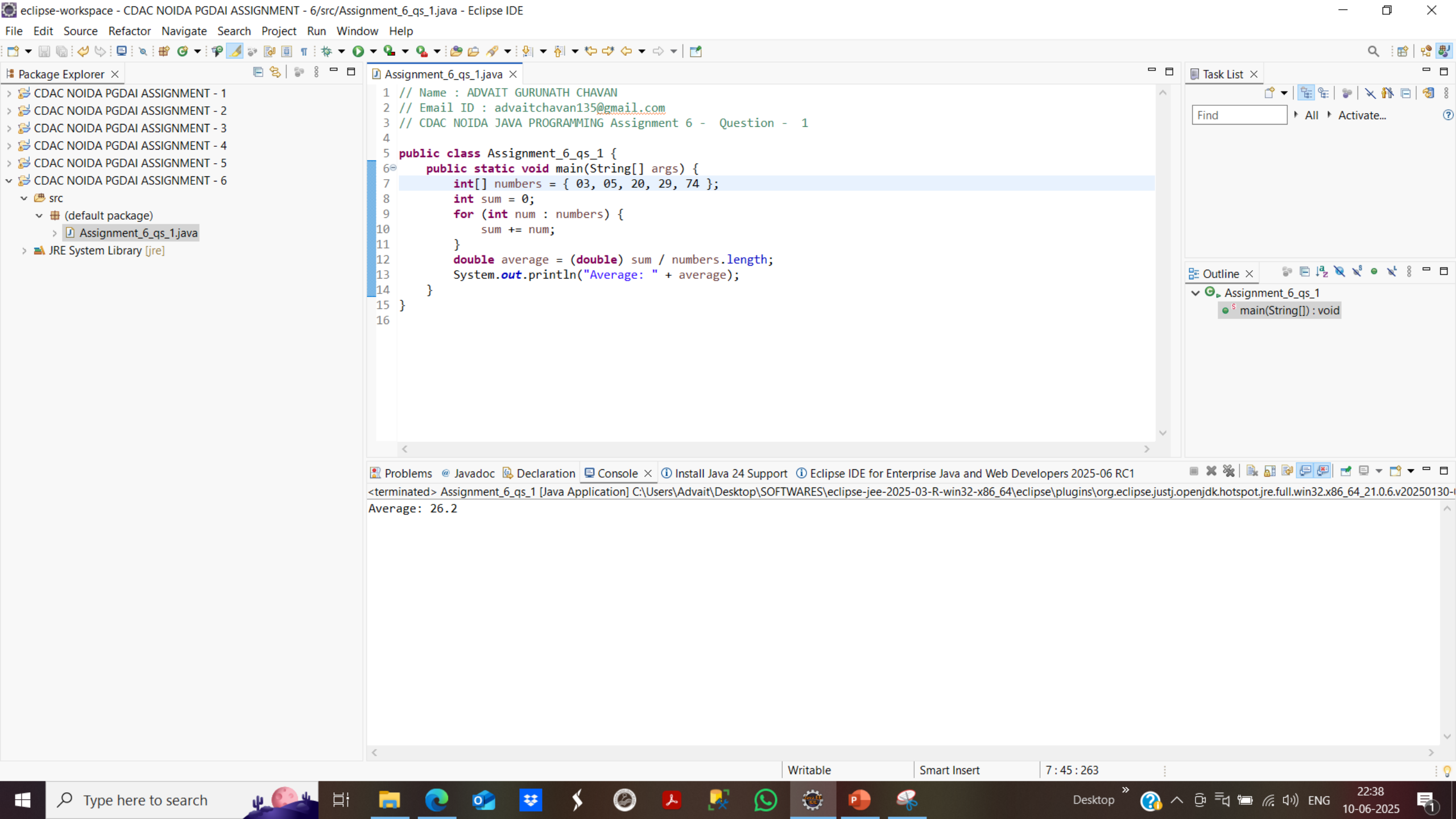
Task List ×

Find ▶ All ▶ Activate...

Outline ×

> Assignment_6_qs_1

```
<terminated> Assignment_6_qs_1 [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130
Average: 30.0
```



- > CDAC NOIDA PGDAI ASSIGNMENT - 1
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- > CDAC NOIDA PGDAI ASSIGNMENT - 4
- > CDAC NOIDA PGDAI ASSIGNMENT - 5
- > CDAC NOIDA PGDAI ASSIGNMENT - 6
 - src
 - (default package)
 - Assignment_6_qs_1.java
- > JRE System Library [jre]

```
1 // Name : ADVAIT GURUNATH CHAVAN
2 // Email ID : advaitchavan135@gmail.com
3 // CDAC NOIDA JAVA PROGRAMMING Assignment 6 - Question - 1
4
5 public class Assignment_6_qs_1 {
6     public static void main(String[] args) {
7         int[] numbers = { 03, 05, 20, 29, 74 };
8         int sum = 0;
9         for (int num : numbers) {
10             sum += num;
11         }
12         double average = (double) sum / numbers.length;
13         System.out.println("Average: " + average);
14     }
15 }
16
```

Find All Activate...

- Assignment_6_qs_1
 - main(String[]) : void

<terminated> Assignment_6_qs_1 [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-
Average: 26.2



11


```
1 // Name : ADVAIT GURUNATH CHAVAN
2 // Email ID : advaitchavan135@gmail.com
3 // CDAC NOIDA JAVA PROGRAMMING Assignment 6 - Question - 2
4
5 import java.util.Arrays;
6
7 public class Assignment_6_qs_2 {
8     public static void main(String[] args) {
9         int[] numbers = { 5, 3, 9, 1, 7 };
10        Arrays.sort(numbers);
11        System.out.println("Sorted array: " + Arrays.toString(numbers));
12    }
13 }
14
```

②



```
>terminated> Assignment_6_qs_2 [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-
Sorted array: [1, 3, 5, 7, 9]
```



Assignment_6_qs_1.java Assignment_6_qs_2.java Assignment_6_qs_3.java X

Task List ✕

- Assignment_6_qs_3
 - main(String[]) : void

openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-



Assignment_6_gs_1.java Assignment_6_gs_2.java Assignment_6_gs_3.java

Assignment_6_qs_4.java ×

Task List ✕

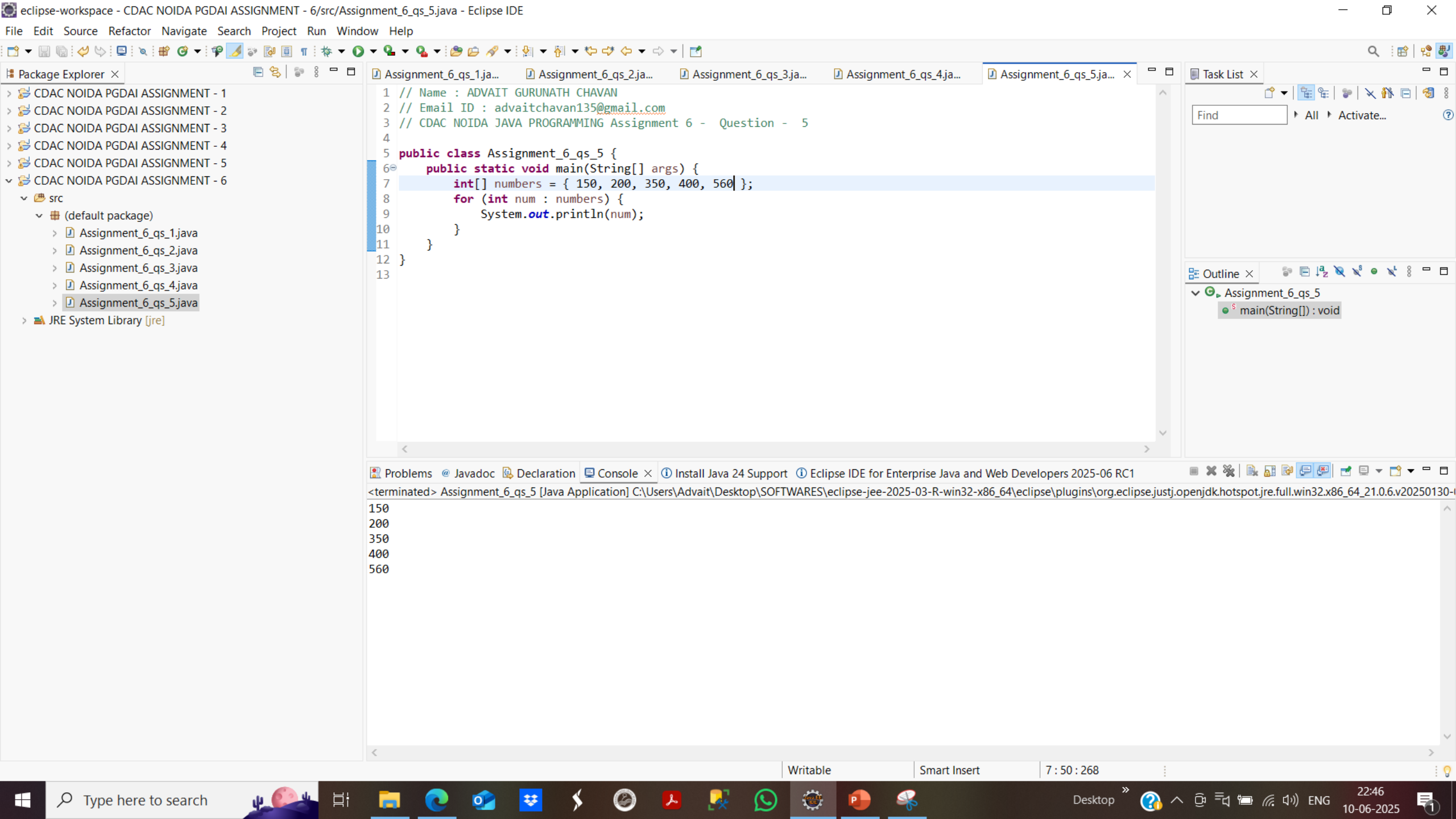
▶ All ▶ Activate...

Outline ×

- Assignment_6_qs_4
 - main(String[]) : void

Problems @ Javadoc Declaration Console × Install Java 24 Support Eclipse IDE for Enterprise Java and Web Developers 2025-06 RC1

```
>terminated> Assignment_6_qs_4 [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-
Reversed string: !!navahC , tiavdA
```



File

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Package Explorer

CDAC NOIDA PGDAI ASSIGNMENT - 1

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CDAC NOIDA PGDAI ASSIGNMENT - 4

CDAC NOIDA PGDAI ASSIGNMENT - 5

CDAC NOIDA PGDAI ASSIGNMENT - 6

src

(default package)

Assignment_6_qs_1.java

Assignment_6_qs_2.java

Assignment_6_qs_3.java

Assignment_6_qs_4.java

Assignment_6_qs_5.java

Book.java

JRE System Library [jre]

Assignment_6_qs_...

Assignment_6_qs_...

Assignment_6_qs_...

Assignment_6_qs_...

Assignment_6_qs_...

Book.java

31

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}

// Overriding toString() method for a user-friendly representation of the Book object

@Override

public String toString() {

return "Book [Title: " + title + ", Author: " + author + ", Price: \$" + price + "];

}

// Main method to test the Book class

public static void main(String[] args) {

// Creating two Book objects using the defined constructor

Book book1 = new Book("Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow",

"Aurélien Geron", 40.50);

Book book2 = new Book("Machine Learning for Absolute Beginners",

"Oliver Theobald", 15.00);

Book book3 = new Book("Designing Machine Learning Systems",

"Chip Huyen", 35.75);

// Printing the details of each book using the overridden toString() method

System.out.println(book1);

System.out.println(book2);

System.out.println(book3);

}

}

Task List

Find

All

Activate...

Outline

title : String

author : String

price : double

Book(String, String, double)

getTitle() : String

getAuthor() : String

getPrice() : double

toString() : String

main(String[]) : void

Problems

Javadoc

Declaration

Console

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<terminated> Book [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\jre\bin\j

Book [Title: Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow, Author: Aurélien Geron, Price: \$40.5]

Book [Title: Machine Learning for Absolute Beginners, Author: Oliver Theobald, Price: \$15.0]

Book [Title: Designing Machine Learning Systems, Author: Chip Huyen, Price: \$35.75]

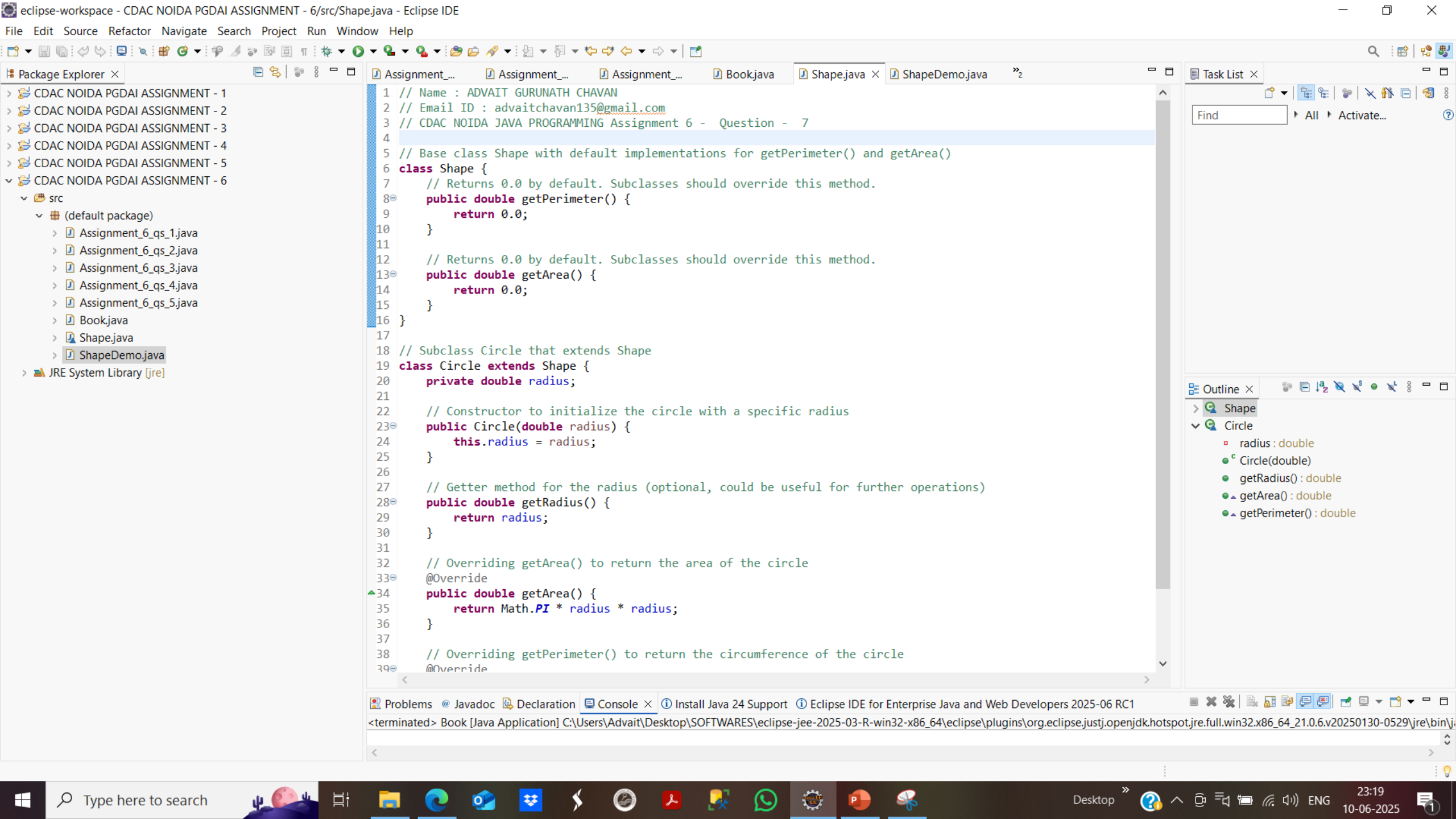
Writable

Smart Insert

50 : 35 : 1744

23:15

10-06-2025



File

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Package Explorer

CDAC NOIDA PGDAI ASSIGNMENT - 1

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CDAC NOIDA PGDAI ASSIGNMENT - 4

CDAC NOIDA PGDAI ASSIGNMENT - 5

CDAC NOIDA PGDAI ASSIGNMENT - 6

src

(default package)

Assignment_6_qs_1.java

Assignment_6_qs_2.java

Assignment_6_qs_3.java

Assignment_6_qs_4.java

Assignment_6_qs_5.java

Book.java

Shape.java

ShapeDemo.java

JRE System Library [jre]

Assignment_... Assignment_... Assignment_... Book.java Shape.java ShapeDemo.java

1 // Name : ADVAIT GURUNATH CHAVAN

2 // Email ID : advaitchavan135@gmail.com

3 // CDAC NOIDA JAVA PROGRAMMING Assignment 6 - Question - 7

4

5 // Main class to demonstrate the functionality

6 public class ShapeDemo {

7 public static void main(String[] args) {

8 // Create a Circle object with a radius of 5.0

9 Circle circle = new Circle(5.0);

10

11 // Display the circle's details: radius, area, and perimeter (circumference)

12 System.out.println("Circle with radius " + circle.getRadius() + ":");

13 System.out.println("Area: " + circle.getArea());

14 System.out.println("Perimeter (Circumference): " + circle.getPerimeter());

15 }

16 }

17

Task List

Find

All

Activate...

Outline

ShapeDemo

main(String[]) : void

Problems

Javadoc

Console

Install Java 24 Support

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<terminated> ShapeDemo [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\jre

Circle with radius 5.0:

Area: 78.53981633974483

Perimeter (Circumference): 31.41592653589793

Writable

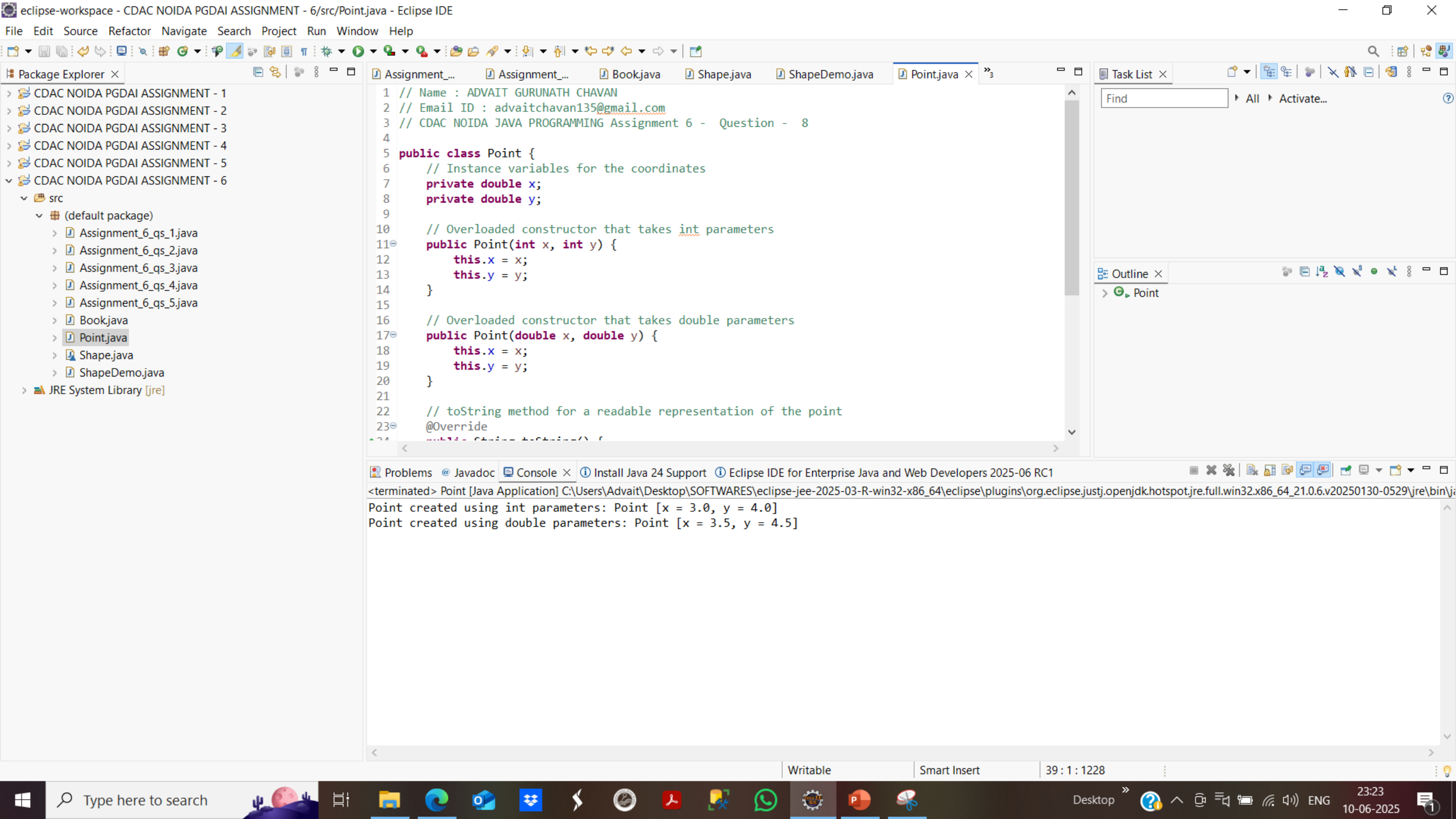
Smart Insert

8 : 55 : 313

Type here to search

23:21

10-06-2025



The screenshot shows the Eclipse IDE interface with the following components:

- Package Explorer:** Displays the project structure with a package named 'src' containing several Java files, including 'Employee.java' which is currently selected.
- Editor:** Shows the source code of 'Employee.java'. The code includes a constructor, a 'getEmployeeSalary()' method, a 'main()' method that creates an 'Employee' object, and a 'setEmployeeName()' method. Line 53, 'emp.setEmployeeName("Vineet Kotian");', is highlighted.
- Task List:** A panel on the right with a search bar and a list of tasks.
- Outline:** A panel on the right showing the class structure, including attributes 'employee_name' and 'employee_salary', the 'Employee' class, and its methods.
- Problems/Console:** The bottom panel shows the output of the Java application. It reports that the application was terminated and displays the initial state of the employee (ID: 303, Name: Advait Chavan, Salary: \$75000.00) and the state after updates (ID: 304, Name: Vineet Kotian, Salary: \$75000.00).

```
37 public String getEmployeeSalary() {
38     return String.format("%.2f", employee_salary);
39 }
40
41 // Main method to demonstrate usage of the Employee class
42 public static void main(String[] args) {
43     // Create an employee object with id, name, and salary
44     Employee emp = new Employee(303, "Advait Chavan", 75000.0);
45
46     // Display initial employee details
47     System.out.println("Employee ID: " + emp.getEmployeeId());
48     System.out.println("Employee Name: " + emp.getEmployeeName());
49     System.out.println("Employee Salary: " + emp.getEmployeeSalary());
50
51     // Modify the employee id and name using setters
52     emp.setEmployeeId(304);
53     emp.setEmployeeName("Vineet Kotian");
54
55     // Display the updated employee details
56     System.out.println("\nAfter updating ID and Name:");
57     System.out.println("Employee ID: " + emp.getEmployeeId());
58     System.out.println("Employee Name: " + emp.getEmployeeName());
59     System.out.println("Employee Salary: " + emp.getEmployeeSalary());
60 }
```

<terminated> Employee [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\jre\

Employee ID: 303
Employee Name: Advait Chavan
Employee Salary: \$75000.00

After updating ID and Name:
Employee ID: 304
Employee Name: Vineet Kotian
Employee Salary: \$75000.00

File

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Package Explorer

CDAC NOIDA PGDAI ASSIGNMENT - 1

CDAC NOIDA PGDAI ASSIGNMENT - 2

CDAC NOIDA PGDAI ASSIGNMENT - 3

CDAC NOIDA PGDAI ASSIGNMENT - 4

CDAC NOIDA PGDAI ASSIGNMENT - 5

CDAC NOIDA PGDAI ASSIGNMENT - 6

src

(default package)

Assignment_6_qs_1.java

Assignment_6_qs_2.java

Assignment_6_qs_3.java

Assignment_6_qs_4.java

Assignment_6_qs_5.java

Book.java

Employee.java

Library.java

Point.java

Shape.java

ShapeDemo.java

JRE System Library [jre]

Book.java

Shape.java

ShapeDemo.java

Point.java

Employee.java

Library.java

```
1 // Name : ADVAIT GURUNATH CHAVAN
2 // Email ID : advaitchavan135@gmail.com
3 // CDAC NOIDA JAVA PROGRAMMING Assignment 6 - Question - 10
4
5 public class Library {
6     // Instance variable to store the library name
7     private String libraryName;
8
9     // Constructor to initialize the library name
10    public Library(String libraryName) {
11        this.libraryName = libraryName;
12    }
13
14    // Inner class Book
15    public class Book {
16        // Method that returns the library name from the outer class
17        public String getLibraryName() {
18            // Access the outer class's libraryName using Library.this.libraryName
19            return Library.this.libraryName;
20        }
21    }
22
23    // Main method to demonstrate instantiation and method call
24    public static void main(String[] args) {
25        // Create an instance of Library with a specified name
26        Library myLibrary = new Library("New Age Coders and Bankers Library");
27
28        // Create an instance of the inner class Book using the outer class instance
29        Library.Book myBook = myLibrary.new Book();
30
31        // Call the getLibraryName() method and print the returned library name
32        System.out.println("The library name is: " + myBook.getLibraryName());
33    }
34 }
35
```

Task List

Find

All

Activate...

Outline

Library

libraryName : String

Library(String)

Book

main(String[]) : void

Problems

Javadoc

Console

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<terminated> Library [Java Application] C:\Users\Advait\Desktop\SOFTWARES\eclipse-jee-2025-03-R-win32-x86_64\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\jre\bin

The library name is: New Age Coders and Bankers Library

Writable

Smart Insert

26 : 72 : 952

23:29

10-06-2025