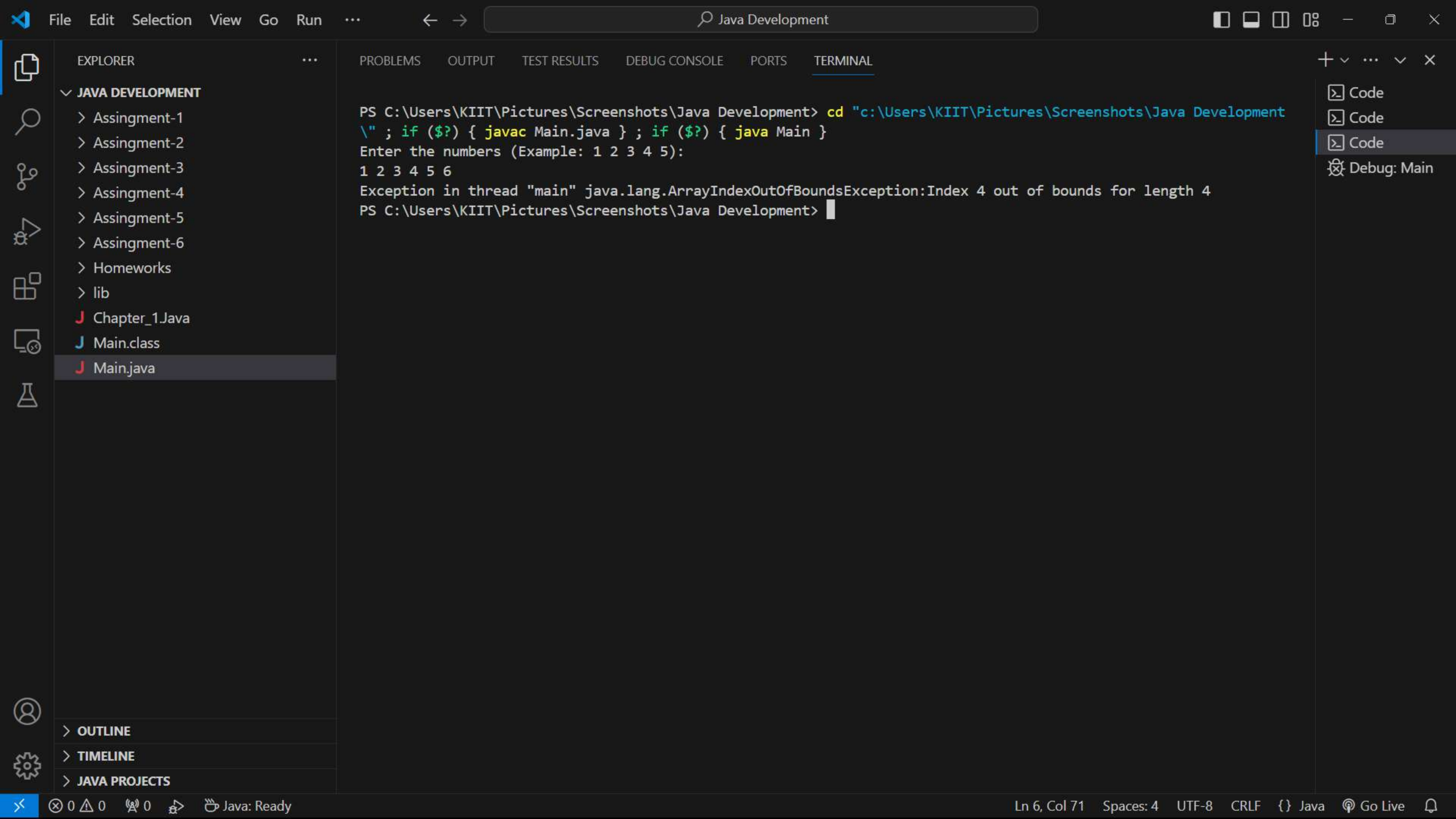


```
File Edit Selection View Go Run ... Java Development
EXPLORER
  JAVA DEVELOPMENT
    > Assingment-1
    > Assingment-2
    > Assingment-3
    > Assingment-4
    > Assingment-5
    > Assingment-6
    > Homeworks
    > lib
    J Chapter_1.Java
    J CheckArgument.class
    J CheckArgumentException.class
    J InvalidHourException.class
    J InvalidMinuteException.class
    J InvalidSecondException.class
    J Main.class
    J Main.java
    J NegativeNumberException.class
  OUTLINE
  TIMELINE
  JAVA PROJECTS

J Main.java x
  J Main.java > Main > main(String[])
    1 import java.util.Scanner;
    2
    3 public class Main {
      Run | Debug
    4 public static void main(String[] args) {
    5     Scanner scanner = new Scanner(System.in);
    6     System.out.println(x:"Enter the numbers (Example: 1 2 3 4 5):");
    7     String[] input = scanner.nextLine().split(regex:" ");
    8     int[] numbers = new int[4];
    9
    10    try {
    11        for (int i = 0; i < input.length; i++) {
    12            numbers[i] = Integer.parseInt(input[i]);
    13        }
    14    } catch (ArrayIndexOutOfBoundsException e) {
    15        System.out.println("Exception in thread \"main\" java.lang.ArrayIndexOutOfBoundsException:" + e.
    16            getMessage());
    17    }
    18    scanner.close();
    19 }
    20 }
```



EXPLORER

▼ JAVA DEVELOPMENT

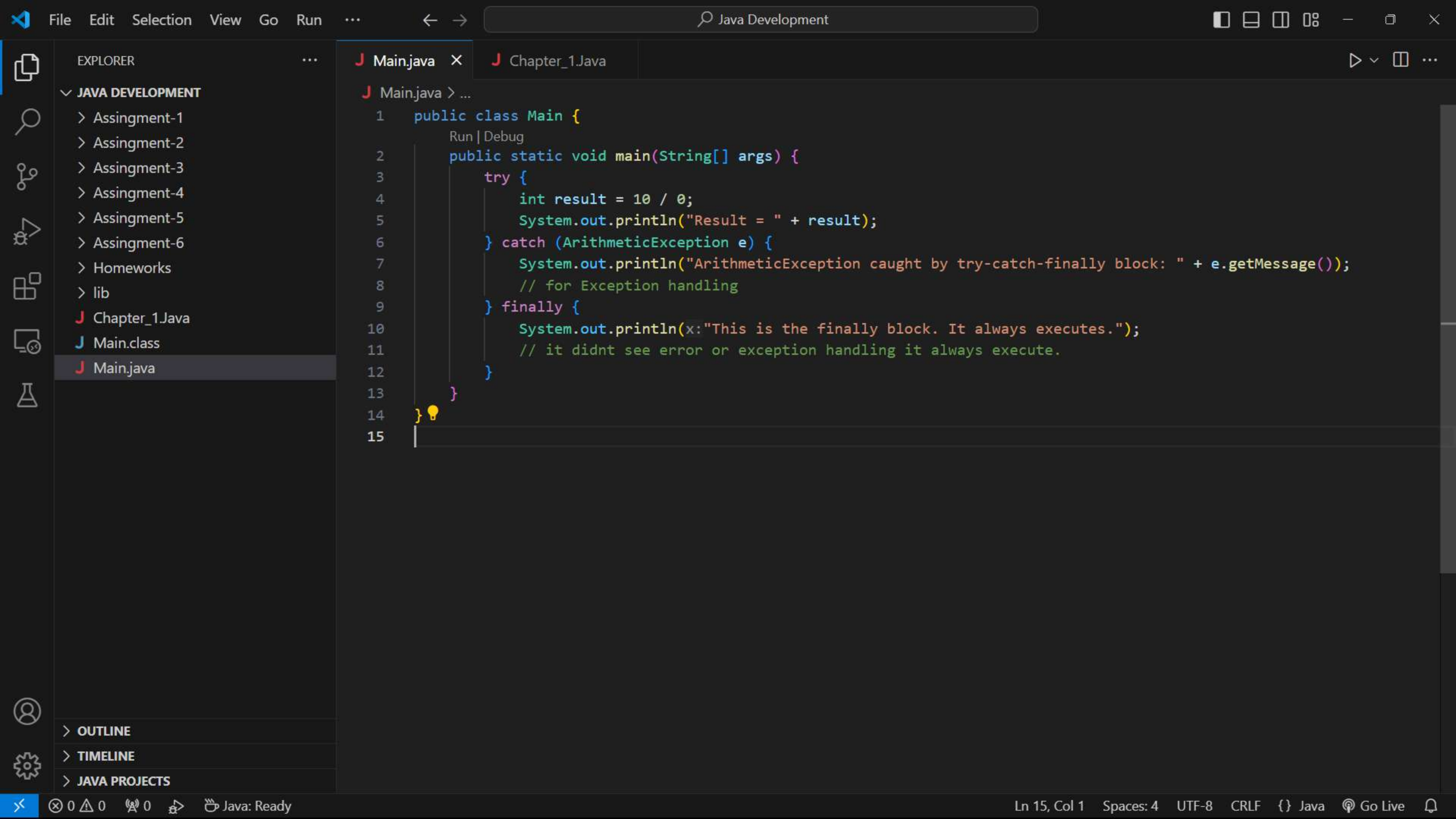
- > Assingment-1
- > Assingment-2
- > Assingment-3
- > Assingment-4
- > Assingment-5
- > Assingment-6
- > Homeworks
- > lib
- Chapter_1.Java
- Main.class
- Main.java

PROBLEMS OUTPUT TEST RESULTS DEBUG CONSOLE PORTS TERMINAL

```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development" ; if ($?) { javac Main.java } ; if ($?) { java Main }
Enter the numbers (Example: 1 2 3 4 5):
1 2 3 4 5 6
Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException: Index 4 out of bounds for length 4
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

- Code
- Code
- Code
- Debug: Main

- > OUTLINE
- > TIMELINE
- > JAVA PROJECTS



EXPLORER

JAVA DEVELOPMENT

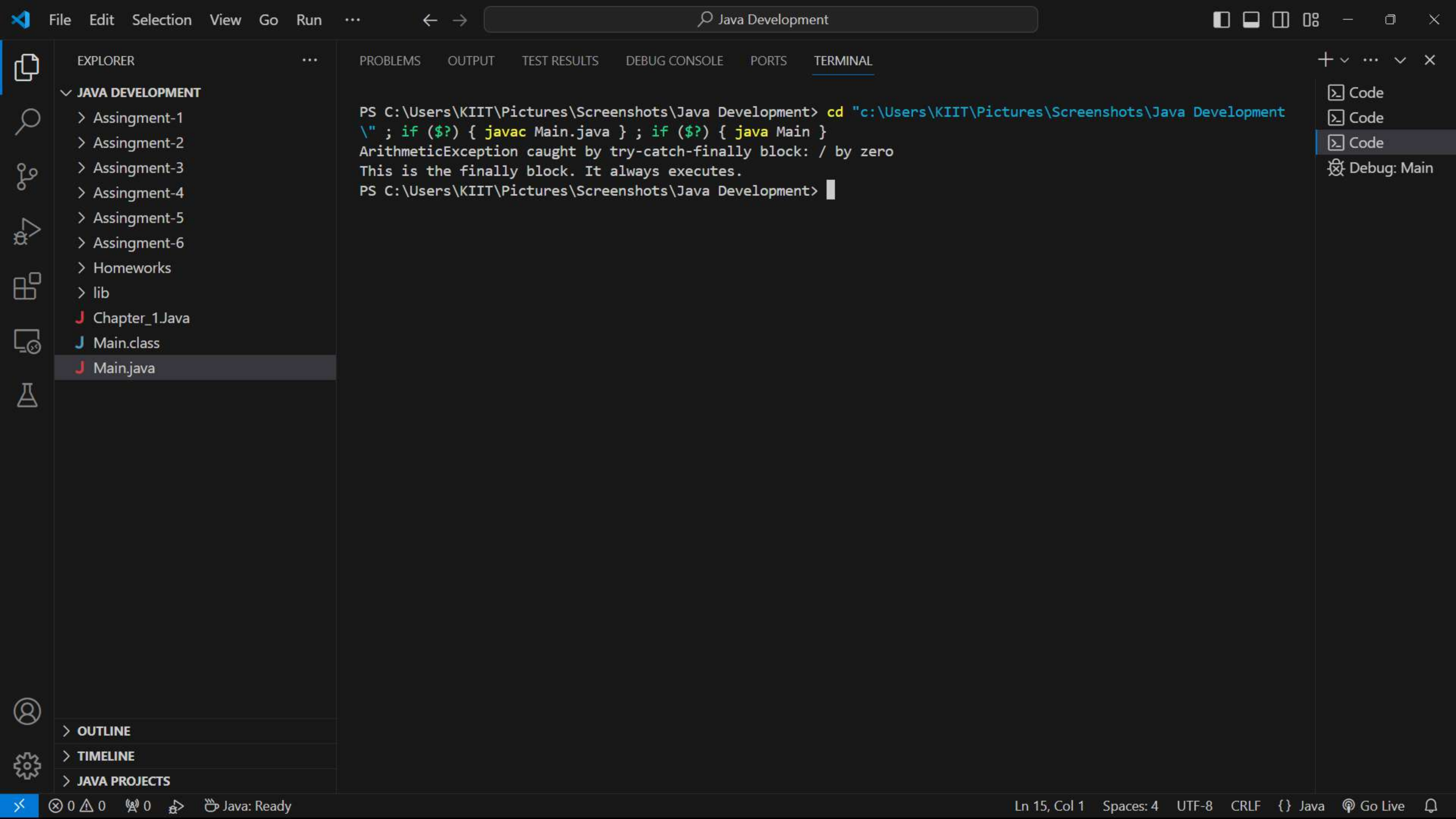
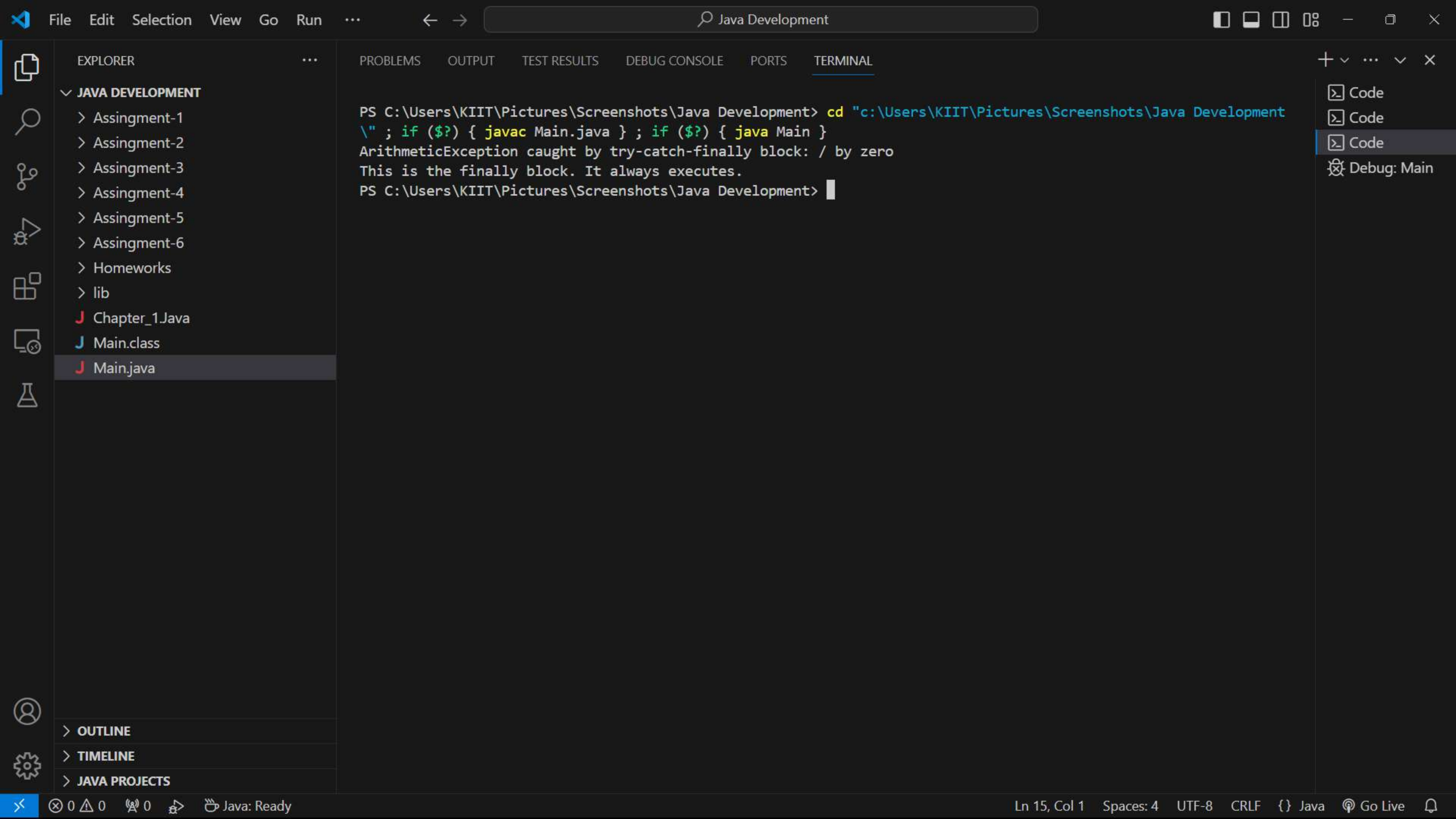
- > Assingment-1
- > Assingment-2
- > Assingment-3
- > Assingment-4
- > Assingment-5
- > Assingment-6
- > Homeworks
- > lib
- Chapter_1.Java
- Main.class
- Main.java

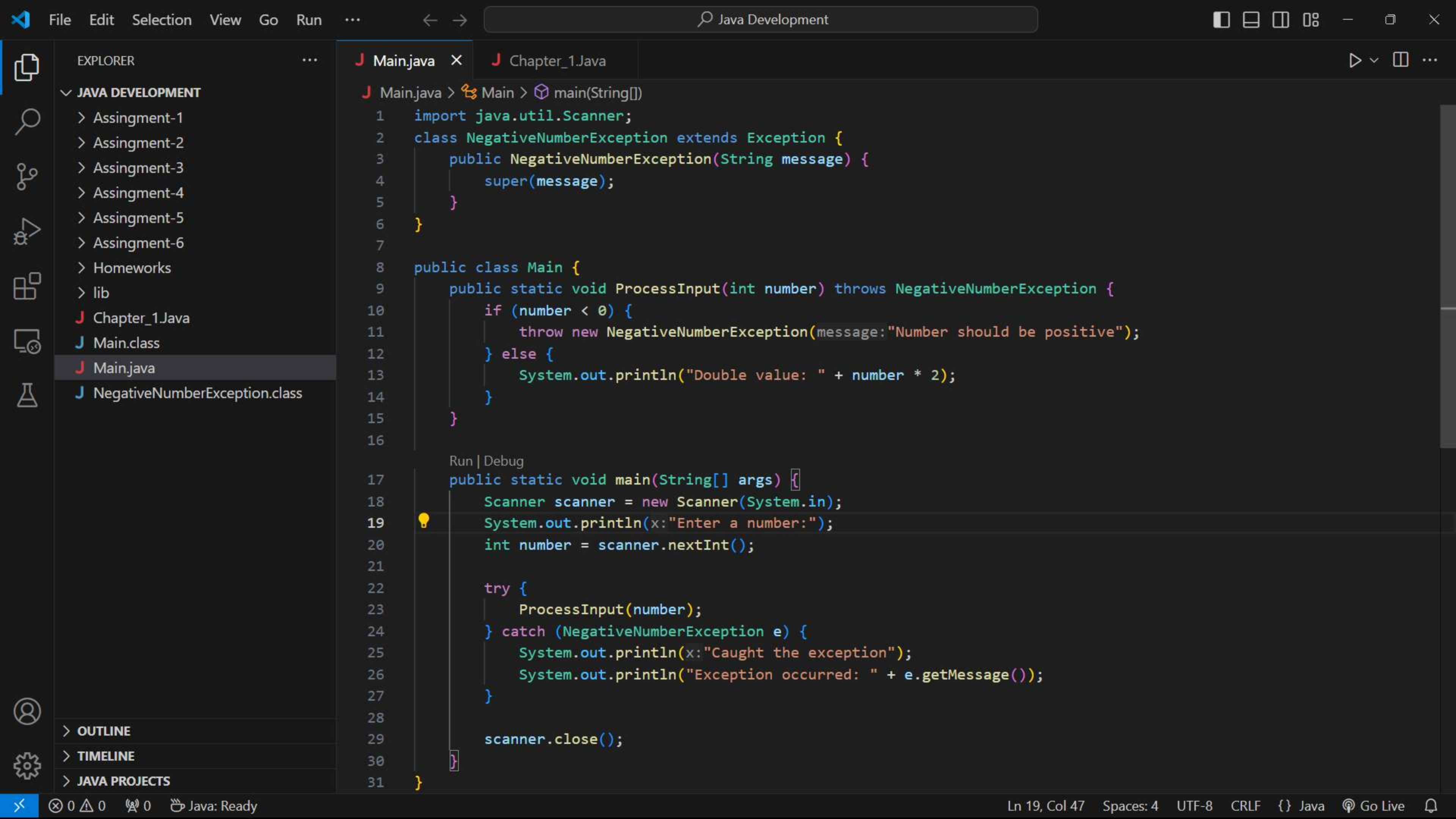
OUTLINE

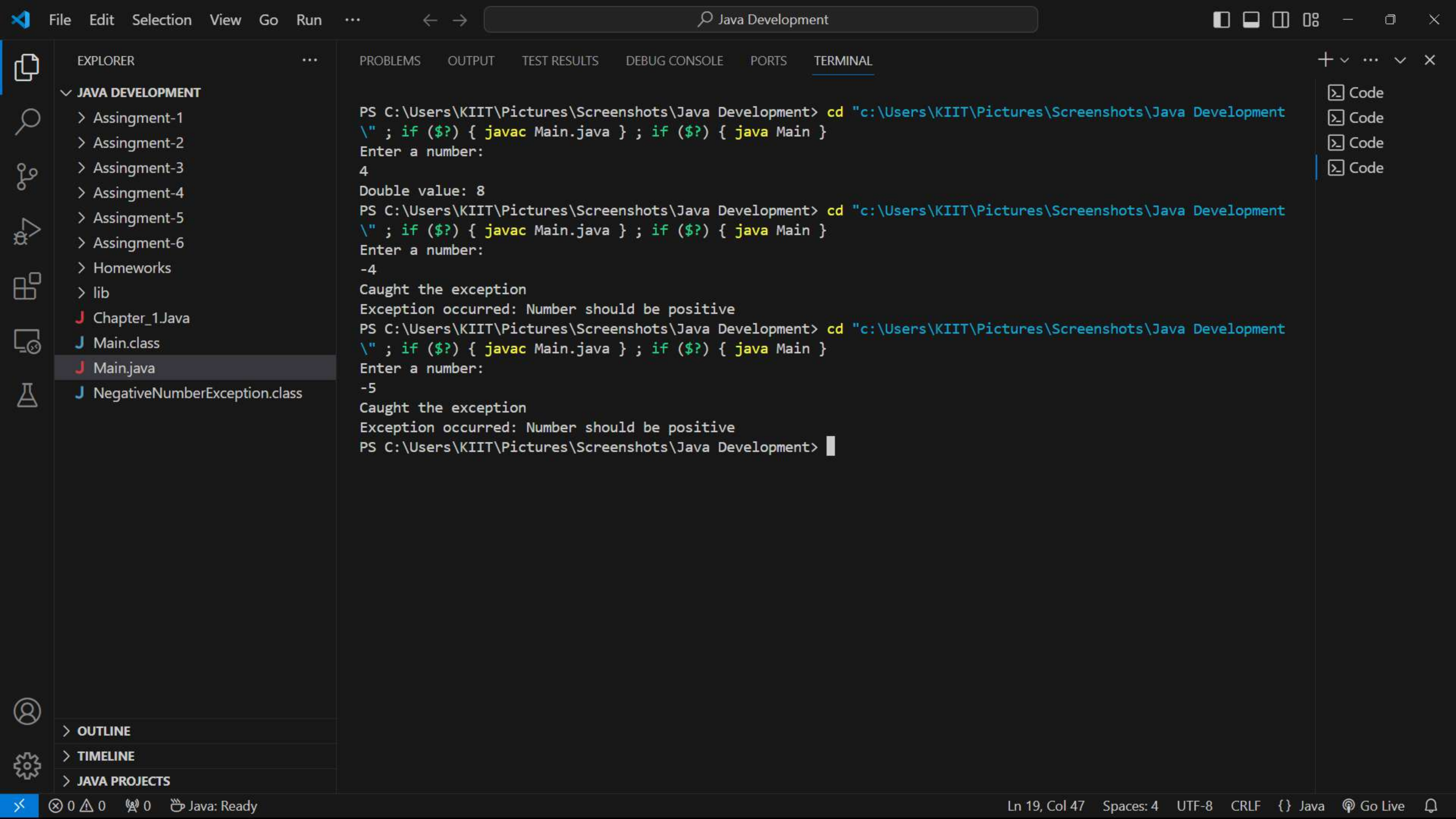
TIMELINE

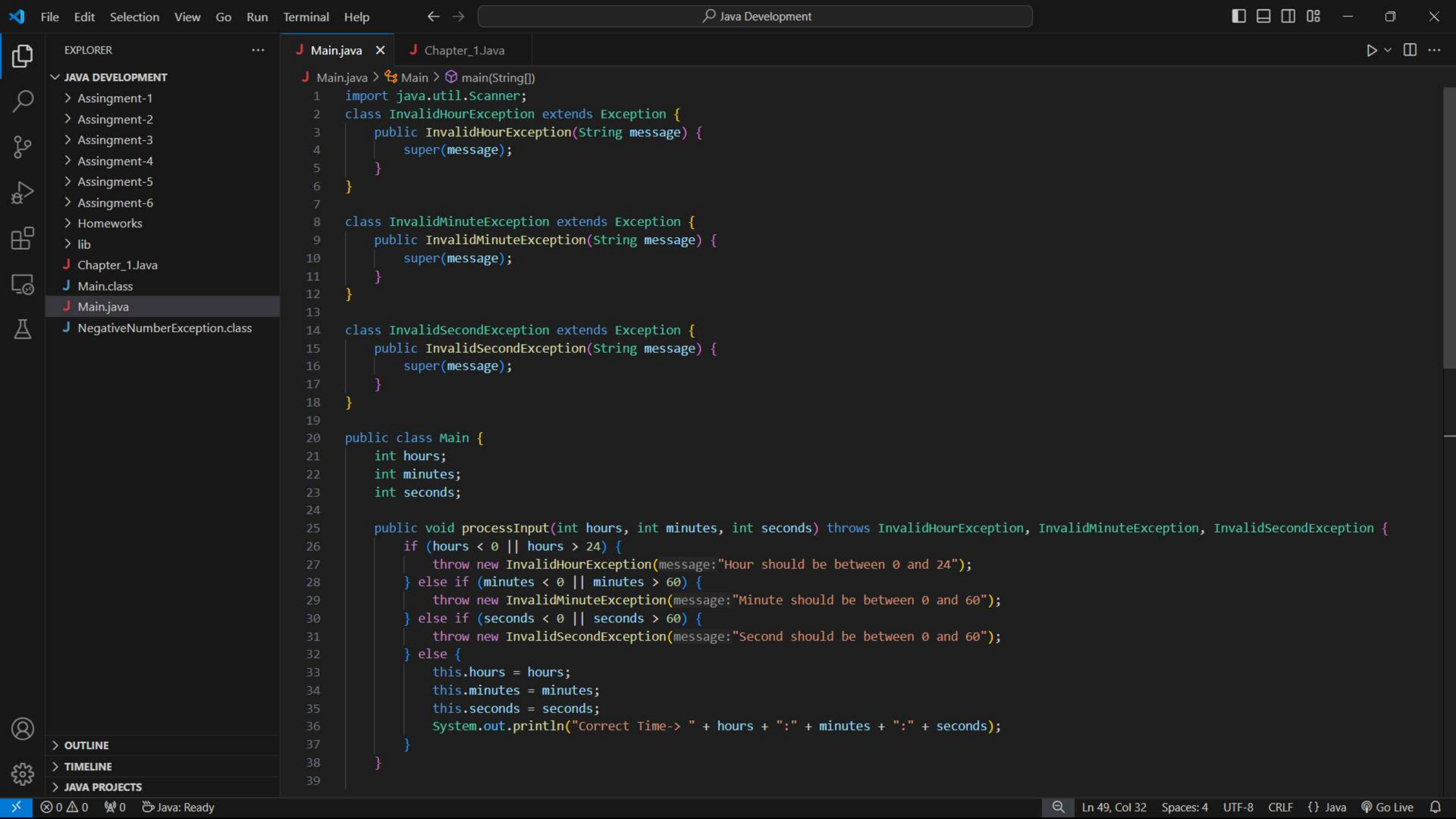
JAVA PROJECTS

```
Main.java > ...
1  public class Main {
    Run | Debug
2      public static void main(String[] args) {
3          try {
4              int result = 10 / 0;
5              System.out.println("Result = " + result);
6          } catch (ArithmeticException e) {
7              System.out.println("ArithmeticException caught by try-catch-finally block: " + e.getMessage());
8              // for Exception handling
9          } finally {
10             System.out.println(x:"This is the finally block. It always executes.");
11             // it didnt see error or exception handling it always execute.
12         }
13     }
14 }
15
```









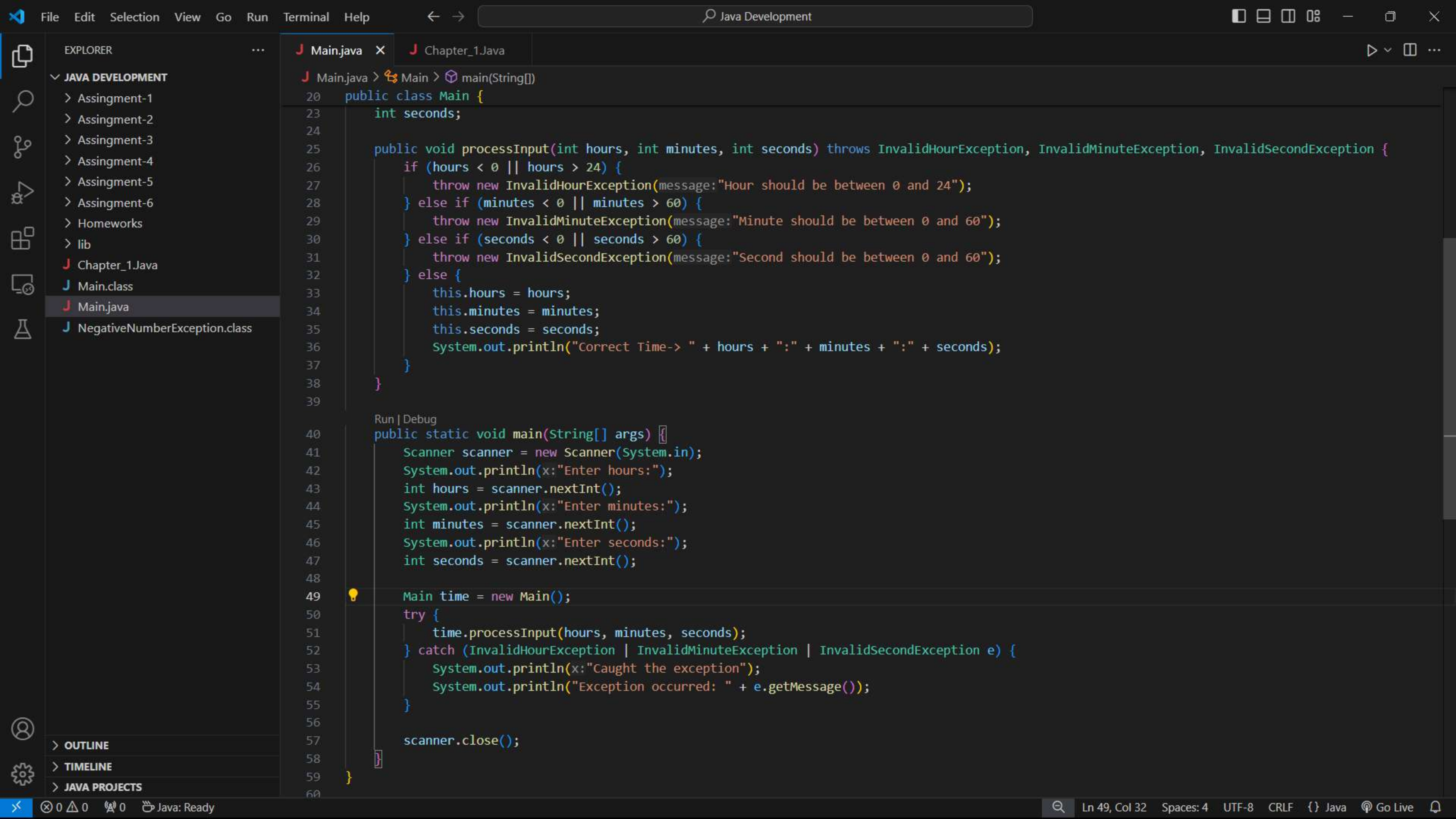
```
File Edit Selection View Go Run Terminal Help
Java Development

EXPLORER
  JAVA DEVELOPMENT
    > Assingment-1
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    > Assingment-5
    > Assingment-6
    > Homeworks
    > lib
    J Chapter_1.Java
    J Main.class
    J Main.java
    J NegativeNumberException.class

  OUTLINE
  TIMELINE
  JAVA PROJECTS

Main.java x Chapter_1.Java
Main.java > Main > main(String[])
1  import java.util.Scanner;
2  class InvalidHourException extends Exception {
3      public InvalidHourException(String message) {
4          super(message);
5      }
6  }
7
8  class InvalidMinuteException extends Exception {
9      public InvalidMinuteException(String message) {
10         super(message);
11     }
12 }
13
14 class InvalidSecondException extends Exception {
15     public InvalidSecondException(String message) {
16         super(message);
17     }
18 }
19
20 public class Main {
21     int hours;
22     int minutes;
23     int seconds;
24
25     public void processInput(int hours, int minutes, int seconds) throws InvalidHourException, InvalidMinuteException, InvalidSecondException {
26         if (hours < 0 || hours > 24) {
27             throw new InvalidHourException(message:"Hour should be between 0 and 24");
28         } else if (minutes < 0 || minutes > 60) {
29             throw new InvalidMinuteException(message:"Minute should be between 0 and 60");
30         } else if (seconds < 0 || seconds > 60) {
31             throw new InvalidSecondException(message:"Second should be between 0 and 60");
32         } else {
33             this.hours = hours;
34             this.minutes = minutes;
35             this.seconds = seconds;
36             System.out.println("Correct Time-> " + hours + ":" + minutes + ":" + seconds);
37         }
38     }
39 }
```

Ln 49, Col 32 Spaces: 4 UTF-8 CRLF {} Java Go Live

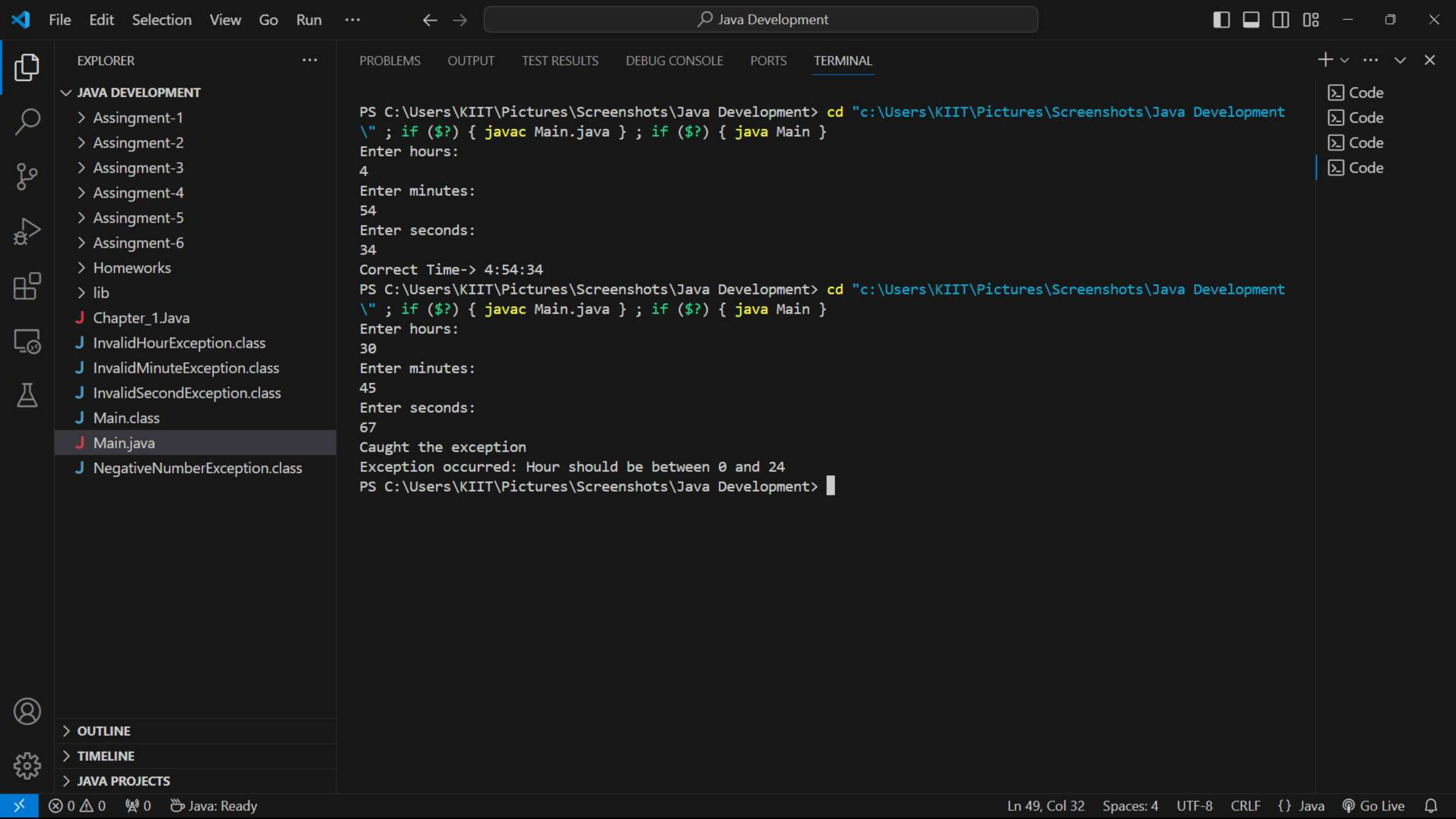


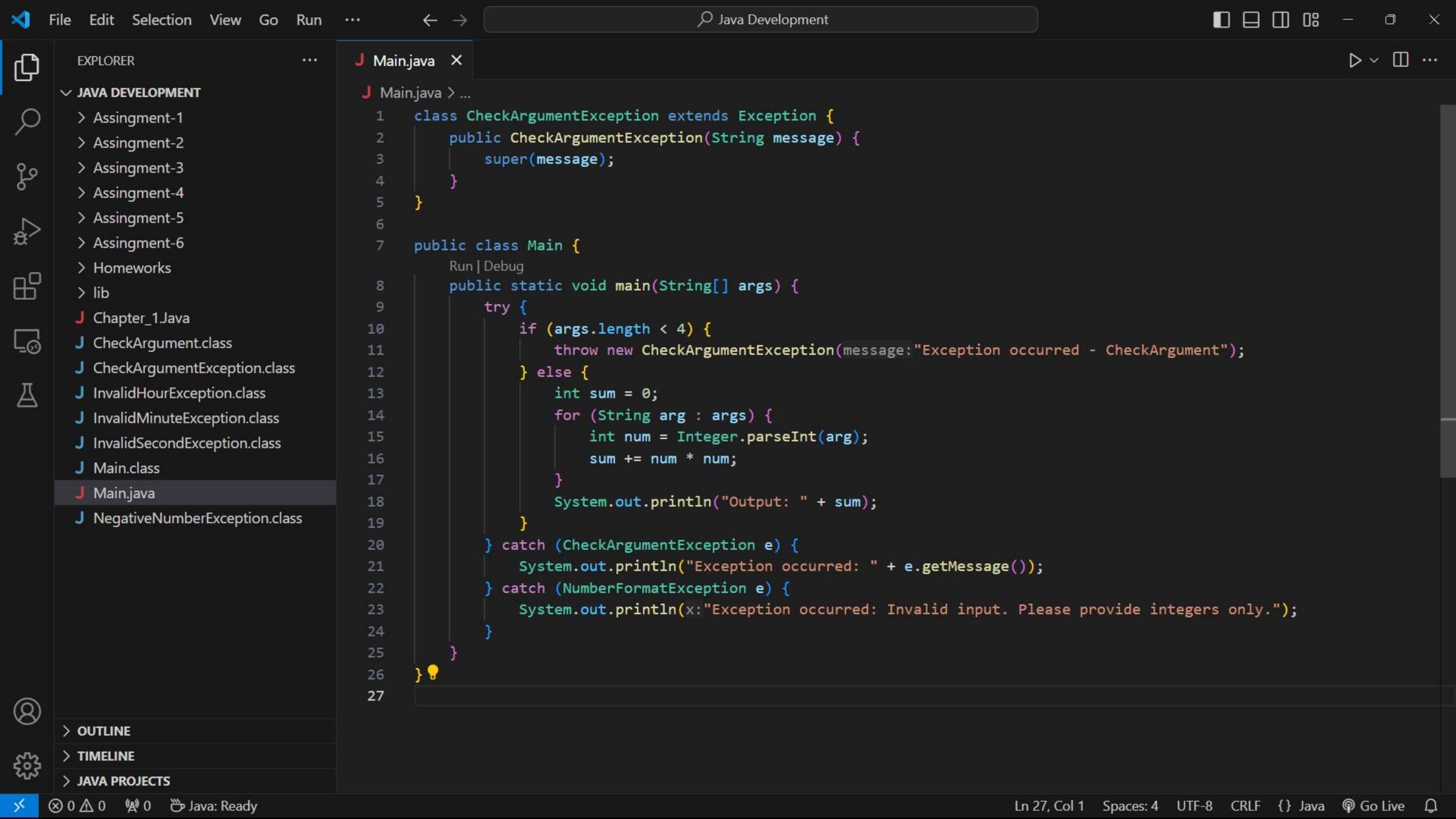
```
File Edit Selection View Go Run Terminal Help
Java Development

EXPLORER
  JAVA DEVELOPMENT
    > Assingment-1
    > Assingment-2
    > Assingment-3
    > Assingment-4
    > Assingment-5
    > Assingment-6
    > Homeworks
    > lib
    J Chapter_1.Java
    J Main.class
    J Main.java
    J NegativeNumberException.class

  OUTLINE
  TIMELINE
  JAVA PROJECTS

Main.java x Chapter_1.Java
Main.java > Main > main(String[])
20 public class Main {
23     int seconds;
24
25     public void processInput(int hours, int minutes, int seconds) throws InvalidHourException, InvalidMinuteException, InvalidSecondException {
26         if (hours < 0 || hours > 24) {
27             throw new InvalidHourException(message:"Hour should be between 0 and 24");
28         } else if (minutes < 0 || minutes > 60) {
29             throw new InvalidMinuteException(message:"Minute should be between 0 and 60");
30         } else if (seconds < 0 || seconds > 60) {
31             throw new InvalidSecondException(message:"Second should be between 0 and 60");
32         } else {
33             this.hours = hours;
34             this.minutes = minutes;
35             this.seconds = seconds;
36             System.out.println("Correct Time-> " + hours + ":" + minutes + ":" + seconds);
37         }
38     }
39
40     Run | Debug
41     public static void main(String[] args) {
42         Scanner scanner = new Scanner(System.in);
43         System.out.println(x:"Enter hours:");
44         int hours = scanner.nextInt();
45         System.out.println(x:"Enter minutes:");
46         int minutes = scanner.nextInt();
47         System.out.println(x:"Enter seconds:");
48         int seconds = scanner.nextInt();
49         Main time = new Main();
50         try {
51             time.processInput(hours, minutes, seconds);
52         } catch (InvalidHourException | InvalidMinuteException | InvalidSecondException e) {
53             System.out.println(x:"Caught the exception");
54             System.out.println("Exception occurred: " + e.getMessage());
55         }
56
57         scanner.close();
58     }
59 }
60
```



EXPLORER

▼ JAVA DEVELOPMENT

- > Assingment-1
- > Assingment-2
- > Assingment-3
- > Assingment-4
- > Assingment-5
- > Assingment-6
- > Homeworks
- > lib
- J Chapter_1.Java
- J CheckArgument.class
- J CheckArgumentException.class
- J InvalidHourException.class
- J InvalidMinuteException.class
- J InvalidSecondException.class
- J Main.class
- J Main.java
- J NegativeNumberException.class

> OUTLINE

> TIMELINE

> JAVA PROJECTS

J Main.java X


J Main.java > ...


```
1  class CheckArgumentException extends Exception {
2      public CheckArgumentException(String message) {
3          super(message);
4      }
5  }
6
7  public class Main {
8      Run | Debug
9      public static void main(String[] args) {
10         try {
11             if (args.length < 4) {
12                 throw new CheckArgumentException(message:"Exception occurred - CheckArgument");
13             } else {
14                 int sum = 0;
15                 for (String arg : args) {
16                     int num = Integer.parseInt(arg);
17                     sum += num * num;
18                 }
19                 System.out.println("Output: " + sum);
20             }
21         } catch (CheckArgumentException e) {
22             System.out.println("Exception occurred: " + e.getMessage());
23         } catch (NumberFormatException e) {
24             System.out.println(x:"Exception occurred: Invalid input. Please provide integers only.");
25         }
26     }
27 }
```



The screenshot shows the IntelliJ IDEA Explorer panel. The left sidebar contains icons for Explorer, Search, Source Control, Run and Debug, Tools, Recent Files, and Run Configuration. The Explorer panel is titled "EXPLORER" and shows a project structure under "JAVA DEVELOPMENT". The structure includes a "lib" directory, a "Chapter_1.Java" file, and several class files: "CheckArgument.class", "CheckArgumentException.class", "InvalidHourException.class", "InvalidMinuteException.class", "InvalidSecondException.class", "Main.class", "Main.java" (highlighted), and "NegativeNumberException.class". The bottom of the sidebar shows icons for a user profile and settings.


PROBLEMS OUTPUT TEST RESULTS DEBUG CONSOLE PORTS TERMINAL

```
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development" ; if ($?) { javac Main.java } ; if ($?) { java Main }
Exception occurred: Exception occurred - CheckArgument
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java Main 4 3 2 1
Output: 30
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> java Main 4 3 2
Exception occurred: Exception occurred - CheckArgument
PS C:\Users\KIIT\Pictures\Screenshots\Java Development> cd "c:\Users\KIIT\Pictures\Screenshots\Java Development" ; if ($?) { javac Main.java } ; if ($?) { java Main }
Exception occurred: Exception occurred - CheckArgument
PS C:\Users\KIIT\Pictures\Screenshots\Java Development>
```

 Code

 Code

 Code

 Code