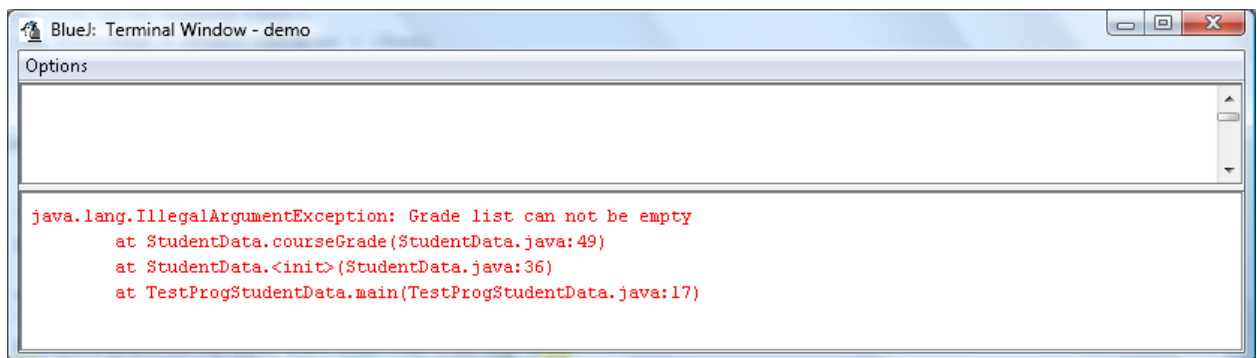


19.01 Assignment Instructions

Instructions: For this assignment, you are going to use assertions and exceptions.

1. Create a folder called **19.01 Assignment** in your Module 19 assignments folder.
 - a. Create class called **StudentData**.
 - b. **StudentData** will need instance variables **firstName**, **lastName**, **testScores**, and **grade** (of types **String**, **String**, **double[]**, and **char** accordingly).
 - c. **StudentData** will need appropriate methods and constructors. Make sure to have a **toString()** method that prints the music in the following format:
John Doe 89.00 78.00 95.00 63.00 94.00 B
Save the class as **StudentData.java**.
2. You are going to modify your StudentData.java to make sure that you include assertions and then throw exceptions accordingly.
 - a. Add a method called **courseGrade(double [] list)** that assigns the student a grade based on the average of their test scores contained in list. You should throw an illegal argument exception if the list is empty.
 - b. Modify your constructor to assign the grade after placing a call to **courseGrade()** passing it **testScores**.
 - c. Modify your constructor to test to make sure than when a name is assigned to a student using the constructor, it is tested to make sure that **firstName** and **lastName** are not assigned empty values.
 - d. Test your program and make sure your methods work. Save your test class as **TestProgStudentData.java**.

Your output when testing might be similar to this:

A screenshot of a terminal window titled "BlueJ: Terminal Window - demo". The window has a standard Mac OS-style title bar with minimize, maximize, and close buttons. Below the title bar is a menu bar with "Options". The main area of the terminal displays a red text error message: "java.lang.IllegalArgumentException: Grade list can not be empty". Below this message, the stack trace is shown in red text: "at StudentData.courseGrade(StudentData.java:49)", "at StudentData.<init>(StudentData.java:36)", and "at TestProgStudentData.main(TestProgStudentData.java:17)".

```
BlueJ: Terminal Window - demo
Options

java.lang.IllegalArgumentException: Grade list can not be empty
    at StudentData.courseGrade(StudentData.java:49)
    at StudentData.<init>(StudentData.java:36)
    at TestProgStudentData.main(TestProgStudentData.java:17)
```

After you have tested your program's exception handling, a valid output (that works) might look like this:

