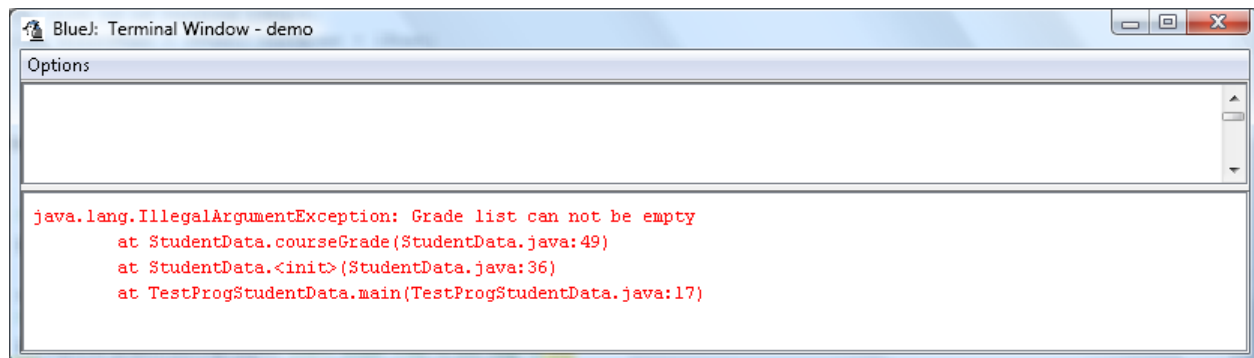


Assessment Instructions

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

1. Create a folder called **Assessment** in your Unit 9 assessments 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:



The screenshot shows a terminal window titled "BlueJ: Terminal Window - demo". It displays a stack trace for a `java.lang.IllegalArgumentException` with the message "Grade list can not be empty". The stack trace includes the following lines:

```
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:

