Assignment 6

- Due Dec 4 by 11:59pm
- Points 30

All assignments are emailed to **cislabs05@gmail.com (mailto:cislabs05@gmail.com)** .

This assignment is build using your code from Assignment 5. You must implement all three requirements.

Req 1 - Create a custom exception handler class called **StudentGradingException** that can (add this functionality in a package called **exception**)

- Centralize capture of all exceptions
- Logs exceptions in a text file.
- Fix at least one exception.

Demonstrate the usage of exception handler in a driver, throwing, logging and fixing the exception. Put this in a separate driver called **Driver1. java.** (Put this in driver package)

Req 2 - Deliver the grade for each student in a serialized file. ((add this functionality in a package called **util** and place the **FileIO** class in util package)

Imagine you are getting your grade report in a serialized file. This will contain your id, lab scores and high, low and avg for each quiz.

You should create a new class called **StudentGrade** (that contains Student and Statistics), then write a method to serialize StudentGrade in FileIO class.

Demonstrate serializing StudentGrade object in a separate driver called **Driver2. java.** (Put this in driver package)

Req 3 - Implement abstract class and Interface (add this functionality in a package called **adapter**)

Create an API (A programming interface) to

1. Print student statistics
2. Print score for a given student id

You should create an Interface called **StudentAPI** in which two methods are declared for functionality (Req 3 - 1 and 2) stated above.

You should create a class **StudentAPIImpl** that would implement StudentAPI. Using methods from other classes, (Student.java, Statistics.java, StudentGrade.java, FileIO.java) implement the two methods in StudentAPI.

Create a driver demonstrating the usage of the API. Put this in a separate driver called **Driver3. java.** (Put this in driver package)