

HOMEWORK GOAL

This is an individual homework grade. The assignment is to modify program 3 to read in a list of students.

PROGRAM REQUIREMENTS

Prompt the user for the name of an input text data file. Open the file and read one student's data per line. Your program should use a Java ArrayList to store each of the student objects that were found in the file. After reading in the student list, iterate through the ArrayList and display each Student object to the screen.

ADDITIONAL INFORMATION

- An example execution is shown below. Your code should work for any number of test grades entered on the line. It should work for any number of students in the data file.
- An example file for the sample shown is given at the end of this assignment document.
- I will enter the full path name for the input file. Do not hardcode in any portion of the filename in your program.
- You will use a Scanner to read in lines of data from the open input file. If the file cannot be opened, print an error message to the screen.
- You may assume all of the data in the input file is valid. There are no data errors.
- You should implement a method on Object Student to return a string containing the Student's formatted data to be used when printing them to the screen.

TO TURN IN

Zip your project up and submit it to canvas. I will set canvas to accept .zip, .gz, .7z or .tar files.

EXAMPLE EXECUTION AND INPUT FILE

Below is an example execution on command line window, user input is shown in *highlighted italics*.

Enter a the name of the input data file:

C:\temp\in1.txt

The student list from the data file contains 3 student entries

The students are:

Allen, Beth has 3 grades and an average of 100.0

Smith, John has 2 grades and an average of 87.0

Jones, Bob has 5 grades and an average of 69.6

An Example Input File is shown below:

```
Beth Allen 100 100 100
John Smith 98 76
Bob Jones 45 65 75 89 74
```