

ISYS 350, Spring 22, Assignment 7 with 3 extra credits, Due Date: Wednesday, 4/20/22

Part 1: Use CSV writer to create a student.csv file with three students' information. You may follow my example on slide # 19 of the File Processing PowerPoint.

StudentID	studentName	major	admittedDate	GPA
S101	Peter	ISYS	2019-08-20	2.5
S106	Paul	FIN	2020-03-15	3.0
S103	Mary	ISYS	2020-05-15	2.7

Part 2: Create a Python program that imports the Student class defined in assignment 6, and use a CSV reader to read the student file and use the information to **create a list of student objects**. You may follow my example on slide # 29 and 30 of the File Processing PowerPoint. Then use the list of student objects to produce a report to show student name, major, academic status and estimated graduation date. At the end of report, show the average GPA of all students.

Name	Major	Status	Estimated Grad Date
Peter	ISYS	Fair	02/20/2022
Paul	FIN	Good	09/16/2022
Mary	ISYS	Fair	11/16/2022

The average GPA is: 2.73

Submit: the program used to create the student.csv file, and the program to read the file and create list of students and the output.

3 extra credits: Text Frequency analysis:

Use a text editor such as notepad to create a text file containing an article you are interested in study. Create a Python program that asks users to enter any number of texts they are interested in analysis and stores the texts in a list. A text can be a word such as "like", or a phrase such as "I like it". Then, for each text in the list, display either "Not Found" message if the text does not exist in the paragraphs; otherwise display the number of times the text is found. (Hint: See example on Slide # 13 of the File Processing PowerPoint).

Do a case-insensitive search by applying string's lower() or upper() function to the search texts and the search paragraphs. You may arrange code as below:

A sample run of the program:

```
Enter a text to analyze: sen
Do you want to enter another text?(y/n)y
Enter a text to analyze: nomination
```

Do you want to enter another text?(y/n)n

There are 4 sen

There are 3 nomination