Exer 02: Selection Statements

INSTRUCTION: Create a python program that will solve the problem below. Save the file as <surname>_ex2.py (e.g. trese_ex2.py). Submit your work on google classroom and turn it in. Write your name, section, and code description on the upper part of your document. Do not forget to document your work.

Problem: Write a program that a student can use to compute their general weighted average (GWA) for 1 semester (5 subjects). The program should first ask for the nature of the semester when the grades were obtained (Pandemic or Pre/Post-pandemic.) The grades and number of units of each course will then be inputted and the GWA and corresponding Latin honor if the student can maintain the GWA for all courses will be displayed. The student will also be notified about their Scholastic Delinquency if two or more courses obtained a grade of 4 or 5. For reference, UP uses the following grading scale:

1.00   1.25   1.50   1.75   2.00   2.25   2.5   2.75   3.00   5.00

The weights (units) of these grades can be:

1.0   2.0   3.0   5.0

The Latin honors and corresponding grade range are:

summa cum laude   GWA ≤ 1.20

magna cum laude   1.45 ≥ GWA > 1.20

cum laude   1.75 ≥ GWA > 1.45

The Scholastic Delinquencies are:

Warning (25-49% of total academic units), 2 subjects for this exercise

Probation (50-75% of total academic units), 3 subjects for this exercise

Dismissal (>75% but <100% of total academic units), 4 subjects for this exercise

Permanent Disqualification (100% of total academic units), 5 subjects for this exercise

Notes:

Having total units less than 15 disqualifies a student from receiving Latin honors during Pre/Post-pandemic semesters.

Having total units less than 12 disqualifies a student from receiving Latin honors during Pandemic semesters.

Having total units more than 18 needs an Overload Permit, if none is filed, the user will be notified that some courses will be dropped.

Sample runs:

```
Windows PowerShell        ×    +  ∨                                            —  □  ×
PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 1
Enter grade:1
Enter number of units:5
Enter grade:1.25
Enter number of units:3
Enter grade:1.75
Enter number of units:5
Enter grade:1.5
Enter number of units:5
Enter grade:2
Enter number of units:3
Your GWA is 1.4762 .
Did you file for an overload permit? (y/n)n
Some of your courses will be dropped.
If you can maintain your GWA you can graduate cum laude.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
Windows PowerShell        ×    +  ∨                                            —  □  ×
PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 1
Enter grade:1
Enter number of units:5
Enter grade:1.25
Enter number of units:3
Enter grade:1.75
Enter number of units:5
Enter grade:1.5
Enter number of units:5
Enter grade:2
Enter number of units:3
Your GWA is 1.4762 .
Did you file for an overload permit? (y/n)y
If you can maintain your GWA you can graduate cum laude.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
Windows PowerShell        ×    +  ∨                                            —  □  ×
PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 2
Enter grade:1.25
Enter number of units:3
Enter grade:1
Enter number of units:4
Enter grade:1.75
Enter number of units:3
Enter grade:2.5
Enter number of units:3
Enter grade:1.25
Enter number of units:3
Your GWA is 1.5156 .
If you can maintain your GWA you can graduate cum laude.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
Windows PowerShell            ×   +   ∨                                                        —   ☐   ✕

PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 2
Enter grade:1.25
Enter number of units:3
Enter grade:1
Enter number of units:5
Enter grade:1.75
Enter number of units:3
Enter grade:2.5
Enter number of units:3
Enter grade:1.25
Enter number of units:3
Your GWA is 1.4853 .
If you can maintain your GWA you can graduate cum laude.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
Windows PowerShell            ×   +   ∨                                                        —   ☐   ✕

PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 2
Enter grade:2
Enter number of units:3
Enter grade:2.5
Enter number of units:3
Enter grade:1.75
Enter number of units:2
Enter grade:2.25
Enter number of units:5
Enter grade:1.5
Enter number of units:3
Your GWA is 2.0469 .
Improve your GWA to receive latin honors.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
Windows PowerShell            ×   +   ∨                                                        —   ☐   ✕

PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 1
Enter grade:4
Enter number of units:2
Enter grade:5
Enter number of units:1
Enter grade:3
Enter number of units:3
Enter grade:2
Enter number of units:3
Enter grade:1
Enter number of units:3
Your GWA is 2.5833 .
Scholastic Delinquency: Warning
Improve your GWA to receive latin honors.
PS C:\Users\PC\Desktop\CMSC 12>
```

```
PS C:\Users\PC\Desktop\CMSC 12> py .\exer2.py
What type of semester were the grades obtained? [1]Pandemic or [2]Pre/Post-Pandemic: 2
Enter grade:4
Enter number of units:1
Enter grade:5
Enter number of units:1
Enter grade:4
Enter number of units:2
Enter grade:5
Enter number of units:1
Enter grade:5
Enter number of units:1
Your GWA is 4.5 .
Did you file for an underload permit? (y/n) y
Scholastic Delinquency: Permanent Disqualification
Improve your GWA to receive latin honors.
PS C:\Users\PC\Desktop\CMSC 12>
```