MIDTERM 1 – PART II

Assume that there are many students in Computational Thinking with Data Science class. Below is just a sample of the academic records of some students (grades in 100 scale):

Name	Midterm 1 (20%)	Midterm 2 (20%)	Midterm 3 (20%)	Final Project (40%)
Bob	90	85	95	90
Anna	95	95	95	95
Tom	80	90	100	100
Mary	100	100	90	95
…	…	…	…	…
Laura	70	80	90	100
Ted	50	60	60	50
Mike	80	60	70	75

Letter grade conversion:

	Guaranteed grade
≥ 90	A
$80 - 89$	B
$70 - 79$	C
$60 - 69$	D
< 60	F

All the questions below must be answered using Python script *(Recommendation: using basic Python, not necessary to use advanced packages like Numpy or Pandas)*

a) Decide a data structure to represent the class with students and grades information with assumption that the class list is long enough. Read the provided csv file containing these information and store into a variable having the defined data structure. **(10 points)**

b) Calculate the final grade of each student and print out the final grades of all students **(5 points)**.

c) Develop a function to convert numeric grade to letter grade. Utilize the developed function to convert numeric grades of students to letter grades and print out the final letter grades of all students. **(10 points)**

d) **Find the student with highest score**, then print that student name and the highest score **(5 points)**.
Note: do not list them with what you see using your eyes. Please you Python script to find out the students and show them to the screen.

e) **List all students** whose final letter grade is A. **(5 points)**
Note: do not list them with what you see using your eyes. Please you Python script to find out the students and show them to the screen.

f) **List all students** whose final grade is F. **(5 points)**
Note: do not list with what you see using your eyes. Please you Python script to find out the students and show them to the screen.

g) **Count all students** whose final grade is either B, or C, or D. **(10 points)**
Note: do not count with what you see using your eyes. Please you Python script to find out the students then count and show the number to the screen.