

Average Grade

Starting from the provided template file, write a program that asks the user to enter a valid score five times. The program should display a letter grade after each score is entered, and it should display the average of the scores after all the scores have been entered. First write the following three functions, then call them from within your main function to complete the program.

get_valid_score This function should ask the user to enter a score. If the score is less than 0 or greater than 100, the function should ask the user to re-enter a score, until the user enters a valid one. Finally, the function returns the valid score.

calc_average This function should accept a list of scores as its argument and return the average of the scores.

determine_grade This function should accept a score as an argument and return a letter grade for the score based on the grading scale in Table 1a.

Score	Grade
[90 – 100]	A
[80 – 90)	B
[70 – 80)	C
[60 – 70)	D
[0 – 60)	F

(a)

Input	Output
Score	Grade
89	B
75	C
91	A
82	B
27	F
average	72.80

(b)

Input	Output
Score	Grade
97	A
–10	Invalid Input.
101	Invalid Input.
100	A
0	F
82	B
65	D
average	68.80

(c)

Table 1: The grading scale (a), and two test cases (b), and (c) for exercise 15.

Test your program with the data in Tables 1b and 1c. Finally, format your program to match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in **Pappy's Purple** to distinguish it from the program's output, but your user input does not need to be colored. Save your program as `avg_grade.py` and submit it along with a screenshot showing a run of **both** test cases.

Terminal

```
$ python avg_grade.py
Enter a score: 97
The letter grade for 97.0 is A.
Enter a score: -10
Invalid Input. Please try again.
Enter a score: 101
Invalid Input. Please try again.
Enter a score: 100
The letter grade for 100.0 is A.
Enter a score: 0
The letter grade for 0.0 is F.
Enter a score: 82
The letter grade for 82.0 is B.
Enter a score: 65
The letter grade for 65.0 is D.
The average score is 68.80.
```