GEOG 1180 Introduction to Geo-Programming

Assignment 6 Functionizing Assignments 2 & 4

In this assignment, you will reorganize your scripts for Assignments 2 & 4 using functions. Here are the requirements for the assignment:

1) Assignment 2:

- Please implement a function named "convert_score(os)" which takes the original score as the input, and converts this score into a letter grade based on the conversion rules in Assignment 2. If the conversion is successful, return the letter grade; otherwise, print an error message and return False to indicate the input is invalid. (Reminder: your convert_score(os) function will not generate any output until it is called, which is in the next step.)
- Please write a script that asks the user to input an original score and then **calls** the convert_score() function to return the user the final grade and print it out to the console. This program only needs to run once, accepting a single original score and printing a single letter grade. A loop is not required for this program. (Hint: input () prompts the user to enter a number and returns the input data as a string variable, this string variable needs to be converted to floating point variable.)

2) Assignment 4:

- Please implement a function named "identify_neighbor(point1, point2)", which takes two points as the input and determines whether the Euclidean distance between these two points is less than 536000 meters. The function should return **True** if the distance is less than 536000 meters and **False** otherwise.
- Please call the identify_neighbor(point1, point2) function in the loop to identify and print out the neighbor IDs of the central point.