GEOG 1180 Introduction to Geo-Programming

Assignment 7   Centroid and Slope

1) Raquel has four friends and they are taking the same class at the University of Utah. They are each at home and plan to discuss a group assignment at a meeting location that is convenient for everyone. They decide that the centroid of their homes will be a good place for them to meet. The   coordinates of their homes are provided in the list "locations" in the "Assignment7_1.py". The format of the data is "[[x, y]…]".

    Please follow the instructions in "Assignment7_1.py" to fill the blank part of the code to calculate and print out the centroid of their homes.

2) Snowbird is a popular ski resort and attracts skiers from all over the world. In this assignment, we would like to know the slope of a ski run at Snowbird. The coordinates and the elevations of the top and bottom of ski run are given in the "Assignment7_2.py". "top" is the start point of the ski run and "bottom" is the end of the ski run. The format of the data is "[x, y, elevation]" Please calculate and print out the slope of the ski run in degrees.

    Please follow the instructions in "Assignment7_2.py" to fill the blank part of the code to calculate and print out the slope of the ski run in degrees.

    Please submit two python scripts named "Assignment7_1.py" and "Assignment7_2.py" to Canvas.