Hand your completed quiz in before the due date. Do not forget to write down your name and student ID number. Marks will be awarded for this quiz based on the clarity of your answers. The marker will pay close attention to the logic of your answers. Please show all your working.

Q.1 Assume that the variable data refers to the list [5, 3, 7]. Write a Python codes that perform the following tasks:

a. Replace the value at position 0 in data with your favorite number.
b. Add the value 10 to the end of data.
c. Insert the value 22 at position 2 in data.
d. Remove the value at position 1 in data.
e. Add the values in the list newData to the end of data.
f. Sort the values in data.

Q.2 Write a loop that computes the sum of the numbers in a list named data.

Q.3 Assume that data refers to a list of numbers, and result refers to an empty list. Write a loop that adds the nonzero values in data to the result list, keeping them in their relative positions and excluding the zeros.

Q.4 Write a loop that replaces each number in a list named data with its absolute value.

Q.5 Define a function named even. This function expects a number as an argument and returns True if the number is divisible by 2, or it returns False otherwise. (Hint: A number is divisible by 2 if the remainder is 0.)

Q.6 Define a function named summation. This function expects two numbers, named low and high as arguments. The function computes and returns the sum of the numbers between low and high, inclusive.

Q.7 Write a Python program that generates sentences. (Hint: See the lecture notes.)