CS:1210 (22C:16) Quiz 7 Version (a)

You have 15 minutes to complete this quiz. Please put away your books, notes, and all electronic devices

1. Suppose that the list `L` equals `[100, ["ok", "is"], 1000, [1, 2], [[1, 2], [2, 3]], 1000]` . Write down the value of `L` after each of these Python statements. For each problem start with the (same) value of `L` given above.

   (a) `L.extend(L[1])`

   (b) `L.remove(1000)`

   (c) `L.append(2*[L.count(1000)])`

   (d) `L[L.index([1, 2])] = L[0]`

   (e) `L[4][1][1] = L[len(L)-1]`

Turn page over

2. Write a function that takes a list `L` of floating point numbers and replaces each number in the list by the average of itself and its two neighbors. For example, element `L[2]` would be replaced by `(L[1] + L[2] + L[3])/3`. Note that `L[0]` has no neighbor on the "left" and would be replaced by `(L[0] + L[1])/2`. Similarly, if the length of `L` is n then the last element, namely `L[n-1]`, has no neighbor on the "right" and would be replaced by `(L[n-2] + L[n-1])/2`.

   The function does not return anything and it should just modify `L` in-place.