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Purpose/Description: Problem 1: Find intersection of elements between two lists

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Certification:

I hereby certify that this work is my own and none of it is the work of any other person.

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Solution 1:

a)

SET result equal to an empty arraylist

SET i, j, and k equal to one

WHILE i is less than or equal to the length of L_1 and j is less than or equal to L_2

 IF L_1 at i is equal to L_2 at j

 ADD one item inside the result and set it to L_1 at i

 ADD one to i and j

 ELSE IF L_1 at i is less than L_2 at j

 WHILE L_1 at i is less than L_2 at j

 ADD one to i

 ELSE

 WHILE L_1 at i is greater than L_2 at j

 ADD one to j

return result

b) If N_2 is greater than N_1 then the running time complexity is $O(N_2)$