5. This program will be based around a class you write named C1.

C1 has 3 data members:

s (which is intended to hold a string)

x, y (which are intended to hold floats)

C1 has 4 member funcs:

A ctor with 3 args. AWC (assume without checking) the first arg is a string and the other two args are floats. The ctor's job is to set the 3 data members equal to the 3 args, respectively.

A function named swap. swap's job is to swap the 2 float data members.

A function named add. add has an arg that is expected to be another C1.

add's job is to create and return another C1 object

whose s is the concatenation of

the invoking object's (self's) s

hyphen

the arg object's s

whose x is the sum of

the invoking object's x

the arg object's x

whose y is the sum of

the invoking object's y

the arg object's y

A function named sum

sum's job is to return the sum of the invoking object's x and y

Write a non-member function named distance with one C1 arg whose job is to return the (non-negagive) distance between the C1's x and y. (For example if x were 6.0 and y were 10.0, distance would return 4.0)

Write a main functionsthat creates at least one C1 object and that calls all 4 member functions and the non-member function. You decide the details of your main.