OOP244SCC Quiz 3:

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1. Name the three types of methods in a class:
2. Having the following structure:

struct Box {

int m\_height;

int m\_width;

};

Add a function called display that shows values of the box as follows:  
m\_height x m\_width  
and go to new line.   
(if m\_height has the value 10 and m\_width has the value 8 the display method should print: 10 x 8 and go to new line)

1. Write a main function and in it create an instance of Box called “B” and set the height and width to 10 and 8 and then call the display of “B” to print it.
2. Rewrite (declare) the Box structure and make sure the two integers are only accessible by the class members and the display functions is accessible by all.
3. What is the difference between a class and a structure in C++.
4. What do ignore functions do in cin?
5. Assuming there is an integer called “num” with 127 in it; print it in 10 spaces and fill the left with “@”. (i.e “@@@@@@@127”)
6. Assuming there is a double variable called “price” with the value 123.4567; print it with only 2 digits after the decimal point. (i.e “123.46” )
7. What is “this” in C++?
8. Add a default constructor to the Box structure (class) to set the height and width to zero;
9. Add a constructor that accepts one integer argument called “side” as an argument and sets the height and width to that value.
10. Add a constructor that accepts two integer arguments called “h” and “w” and sets the m\_height and m\_width to the corresponding values.
11. What is a destructor.
12. If the Box only had the one and two argument constructors and no default constructor could we have an array of Boxes created as follows?  
    Box B[10];

Why?