Quiz 2
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Duration: 30 min

Basic

1 (15 points). Describe in your own words what's the difference between:
  a) public class MyClass
  b) protected class MyClass
  c) private class MyClass
  d) class MyClass

2 (10 points). We know that if we need default constructor with empty body, then we can skip writing it. We want to implement a class called 'Car' in Java, which should have both default & copy constructors. Do we need to write both constructors for our case? Can we skip default one? Justify your answer.

Inheritance

3 (20 points). Let say we have parent class P having default and copy constructors, and child class C extending class P and having default and copy constructors as well.
We want to create an object of the child class C passing another object of class C as an argument. Which constructor(s) will be called and why?

4 (15 points). Let say we have parent class P which has private method called "max". We have another class C which extend our parent class P. Describe in your own word what will happen if you create an object of class C in terms of methods. Will your object extend and have "max" method for public or private usage?

5 (20 points). Assume we have parent class P with the following methods:
  a) print (int a)
  b) print (double a)
Also, we have child class C which extends parent class P and have the following method:
  a) print (string a)
Now, we want to create an object of class C in Java, and we need to know what methods will have our object. Write down the methods that the object of class C will have and explain why is that. Is it language specific? Is there any difference if you do that in C++?

6 (20 points). Assume we have parent class P with the following methods:
  a) max (int[] a)
  b) min (int[] a)
Now, we want to create a class C and implement method
  a) avg (int[] a)
Also, we want our class C to have method a) from parent class P, thus we will extend C from P. However, if we extend we will have method b) from parent P too. Our child class C should not have second method at all. Is there a way to extend the first method but not the second one? Why?
Note, we do not want to make the second method 'private', as other classes extending class P may need it.