

CMSC131, UMCP, Java Class Concepts II Exercise

The goal of this exercise is to gain a better understanding of class concepts discussed in class. In a group of at least 3 students answer the questions below. To answer the questions follow this approach:

- a. One of your group members should be designed as the leader. This student will read the questions and keep moving from one question to the next. The leader will provide some reasonable amount of time for each question before moving to the next.
- b. Before moving to the next question the group will discuss their answers.
- c. Although you do not need to submit your answer for a grade, keep in mind that these questions can be part of midterms and quizzes.

1. What is parameter?
2. What is an argument?
3. What is another name for the term reference?
4. What is name of the mechanism used to pass values to methods in Java?
5. What is the difference (if any) between passing a primitive value to a function and passing a reference?
6. What is a stack frame?
7. How does the stack frame supports functions that use the same name for local variables?
8. What is a memory map?
9. Draw a memory map for the Driver.java class. Illustrate the contents of the stack, heap and static area up to the point marked with the comment `/* HERE */`.

The code can be found at

<http://www.cs.umd.edu/class/fall2015/cmsc131/content/labs/Week7/JavaClassConceptsIICode.zip>

10. Discuss the following with your classmates: Can we have an object inside of another object? For example, does the previous GiftBag have a Car object inside of it?