

CSSE 220 – Object-Oriented Software Development  
Rose-Hulman Institute of Technology

## Worksheet 06

Name (Print): \_\_\_\_\_ Section: \_\_\_\_\_

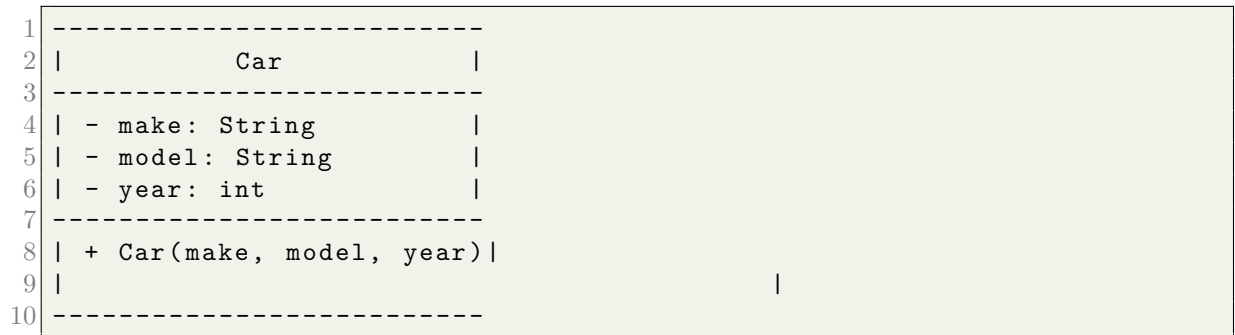
1. 1) Variables of primitive type store \_\_\_\_\_  
2) Variables of class type store \_\_\_\_\_
2. Draw below 2 boxes for:  
**int x = 10; int y = 20;**
3. Draw a diagram for a class instance:  
**Rectangle box = new Rectangle(x, y, 5, 5);**
4. 1) When a primitive variable is assigned to another, it copies a copy of \_\_\_\_\_  
2) Modifications to one variable \_\_\_\_\_ the other variable
5. What is the value of y:  
Answer: \_\_\_\_\_  

```
1 int x = 5;  
2 int y = x;  
3 int z = y;  
4 x = 15; z = 20;
```
6. 1) When an object is assigned to another, it creates a copy of \_\_\_\_\_  
2) Modifications to one variable \_\_\_\_\_ the other variable
7. Draw boxes for:  
**int x = 10;  
int y = x;  
y = 20;**

(a) \_\_\_\_\_

(b) \_\_\_\_\_

8. 1) \_\_\_\_\_ equality compares the memory addresses  
 2) \_\_\_\_\_ equality compares the values of the objects
9. True/False Strings are mutable (=can be modified once created)
10. \_\_\_\_\_ - Object-oriented design principles, using UML for modeling, applying design patterns, refactoring code, and implementing testing strategies
11. Define UML:
12. Complete this UML diagram by adding a public method getDescription() that returns a string



13. Complete Design Principle 1:  
**Make sure your design allows proper functionality**

- (a)
- (b)
- (c)

14. Complete Design Principle 2:  
**Structure design around the data to be stored**

- (a)
- (b)