

/\* Based on Java Tutorials book, Chapter 4 \*/

- 1) What's the main difference between "this" and "super"?
- 2) In the code below, which variables belong to the instance? Which belong to the class?

```
public class Homework_2 {  
    Boolean b2;  
    private boolean b3;  
    protected static String s2;  
    public static int x4;  
    private short x5;  
}
```
- 3) Name two ways that can be used to access a class variable?
- 4) Type in the code above and a main() method that accesses each variable. Use 2 Boolean methods (see Boolean type) on b2 and print the results.
- 5) Name 2 ways to change the value of s2? Which is more appropriate?
- 6) Can you use "this" to access b2 from the main() method? Why or why not?
- 7) What convention do variable and method names use for the first letter? What about class name?
- 8) Stretch Goal: Show how could you print x4 as a hexadecimal number? Hint: change "println" to "printf" and read its documentation
- 9) Split the class in two, with b2, b3, s2 in Homework\_2 class, and x4, x5 in a subclass of Homework\_2. Instantiate both classes. Feel free to rename things to make it more interesting for you. What keyword is used on the class to indicate it's a subclass? Can the subclass directly access b3 and x4?
- 10) Create an instance of the subclass. What is missing? Go ahead and fix it.
- 11) Write a PlayingCard class where each instance represents a card. Write another class called Deck that has 52 instances of the PlayingCard class. What might you use to hold the PlayingCard instances? Write a main() method in both classes where you test all class functionality.