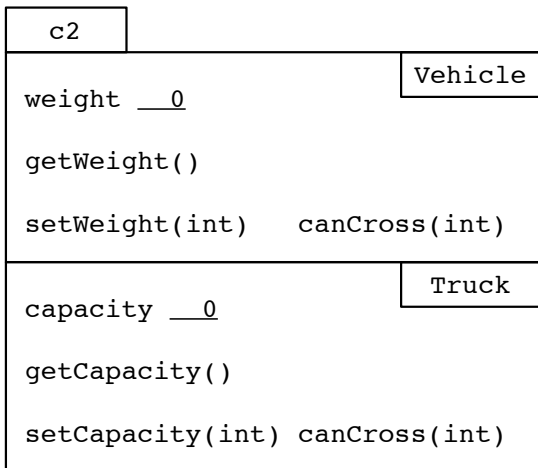
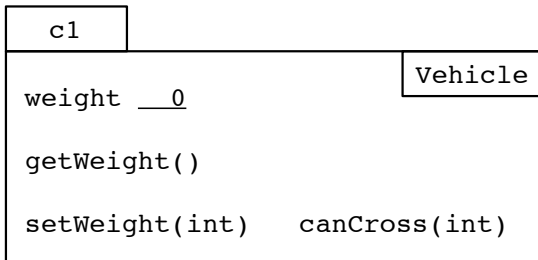


- 1.
- (a) Class - A file drawer containing manilla folder of objects
Object - a manilla folder in the file drawer
 - (b) Static - in the class file drawer
Non-static - In each manilla folder in the class's file drawer.
 - (a) Parameter - A variable declared within the parentheses of a method header
Argument - An expression that appears within the parentheses of a method call
 - (b) Constructor - Initializes fields of a newly-created object
Procedure - Performs some action without returning a value
Function - Performs some action and returns a value
 - (c) **true** || (5/0 < 1) true
 (5/0 < 1) || true BAD
 3/2 1

2.



3. (a) weight, isEqual, getWeight, setWeight, canCross

- (b) canCross
- (c) **true**

```

4. (a) public class Airplane extends Vehicle
{
    /** number of passengers */
    private int numPassengers;

    /** Constructor: instance with weight
        w and p passengers */
    public Airplane(int w, int p) {
        setWeight(w);
        numPassengers= p;
    }

    /** = total weight of plane */
    public int flyWeight() {
        return getWeight() + numPassengers*150;
    }

    /** = "it can cross a bridge with max
        weight w" */
    public boolean canCross(int w) {
        return true;
    } OR
    /** = "plane can cross a bridge with max
        weight w while taxiing" */
    public boolean canCross(int w) {
        return flyWeight() <= w;
    }
}
    
```

- 4. (b) 1. Declare n (or use a constant instead)
- 4. (b) 2. Change flyweight to flyWeight

```

5. /** spec given on prelim 1, question 5 */
public String makeValidMethodName(String s) {
    s= s.replaceAll(" ", "");
    if (s.length() == 0)
        s= "_";
    if (!Character.isLetter(s.charAt(0))
        && s.charAt(0) != '_' )
        s= "_" + s;
    if (s.length() > 65535)
        s= s.substring(0,65535);
    return s;
}
    
```