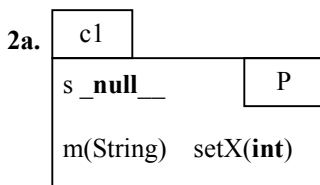


```

1. /** See Prelim for the spec.*/
public static String fixZip(String s) {
    if (s.indexOf("Cornell") == -1) {
        return s;
    }
    int k= s.indexOf("14850");
    if (k == -1) {
        return s;
    }
    return s.substring(0,k) + "14853" +
        s.substring(k+5);
}
    
```



3a. Name, netId, Student, getName, getNetId, toString, equals (you do not have to remember this one; it is in class Object).

3b. toString.

3c. "Johnny, JD123, A&S".

```

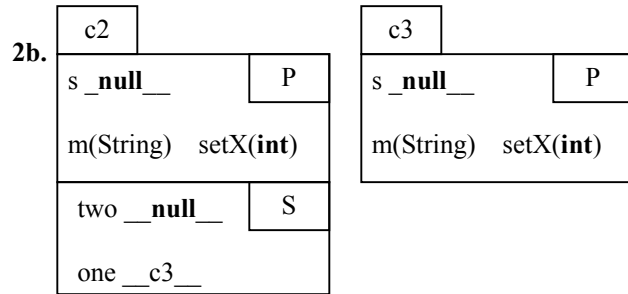
3d. /** An instance: info about a freshman */
public class Freshman extends Undergrad
private int APcredits; // no. of AP credits

/** Constructor: a freshman named n with
netId id, in college c, and with x AP credits */
public Freshman(String n, String id,
                String c, int x) {
    super(n, id, c);
    APcredits= x;
}

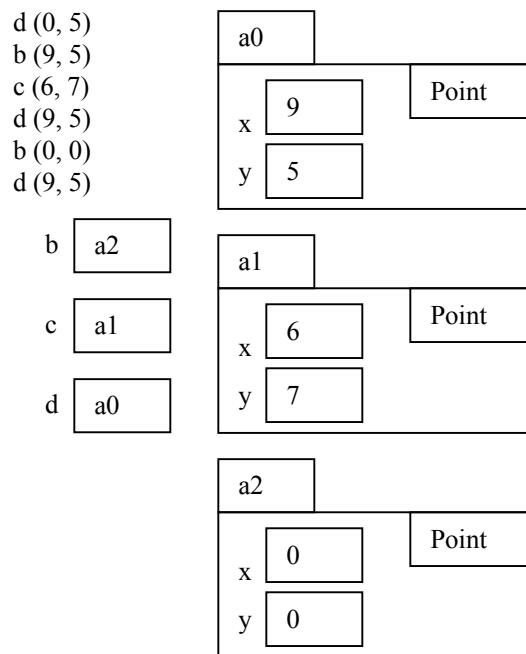
/** = number of APCredits of this student */
public int getAPCredits() {
    return APcredits;
}

/** = set the number of APCredits to ap */
public void setAPCredits(int ap) {
    APcredits= ap;
}

/** = a representation of this student */
public String toString() {
    return super.toString() + ", " +
        APcredits + " AP credits";
}
}
    
```



4. Below is the output. We also show the final state of variables b, c, d.



5a. Parameter: a variable that is declared within the parentheses of a method header.

5b. 1. Create (draw) a new manila folder (object) of the class, in this case, C. 2. Execute the constructor call in the new-expression, in this case, C(5, 3). 3. Yield as value of the new-expression the name (on the tab) of the new object.

5c. Evaluate the <expression> and store its value in the <variable>.

5d. Local variable: a variable declared in a method body. Its scope is the sequence of statements that follow the declaration, until the end of the block.

5e. return <expression>;.