1. Mark which of the **bold** lines below would be allowed (check mark) by Java's encapsulation system.

```
public class X {
  public    int a;
  private   int b;
  protected int c;
  public static int d;

  private   int func1() {…}
  protected int func2() {…}
  public    int func3() {…}
}

public class Y extends X{
  public int m;
  public void func4() {
    m = func1();
    m = func2();
    m = a;
    m = b;
    m = c;
    m = d;
  }

}

// Assume the code below is in the main function in another class Z
int var;
var = X.a;
var = X.b;
var = X.c;
var = X.d;
var = X.m;

X x1 = new X();
var = x1.a;                    x1.func1();
var = x1.b;                    x1.func2();
var = x1.c;                    x1.func3();
var = x1.d;                    x1.func4();
var = x1.m;

Y y1 = new Y();
var = y1.a;                    y1.func1();
var = y1.b;                    y1.func2();
var = y1.c;                    y1.func3();
var = y1.d;                    y1.func4();
var = y1.m;
```

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2. Write a program to:

- Store two types of pets---cats and dogs
    - When you create a pet, the constructor takes a name. Cats also take a number of lives remaining.
    - All pets have a printName() function that prints the name
    - All pets have a makeNoise() function
        - Cats: "NAME says meow" and dogs: "NAME says woof"

- Your main method should:
    - Create a single array with two dogs named Fido and Spot, and three cats named Fluffy, Mowzer, and Pig
    - Print the names of all the pets
    - Call the makeNoise function on the first dog and second cat

- Use good OOP practices!

Write your program in https://repl.it/@twood02/petsQuiz and then paste it into a "SECRET Gist" at gist.github.com using this info:

Description: Pets Quiz
File Name: Pets.java