Example 3.1 StaticDemo.java

```java
package joi.examples;

public class StaticDemo {
    private static int counter = 0;
    private static int classVar = 0;
    private static Terminal terminal = new Terminal();

    int objectField = 0;

    public StaticDemo(int objectFieldValue) {
        objectField = objectFieldValue;
        counter++; // increment counter (counting the StaticDemos made)
    }

    public void instanceMethod() {
        terminal.println("counter = " + counter + "; objectField = " + objectField);
        classVar = classVar + objectField;
    }

    public static int classMethod() {
        // Class methods may refer only to class variables (and other class methods), as well as
class members may refer only to class variables
        return counter + classVar;
    }

    public static void main(String[] args) {
        for (int i = 0; i < 5; i++) {
            StaticDemo sd = new StaticDemo(i);
            terminal.print(i + ": ");
            sd.instanceMethod();
            terminal.println("StaticDemo.classMethod() = " + StaticDemo.classMethod());
            terminal.println("classMethod() = " + classMethod());
        }
        terminal.println("last classMethod() = " + classMethod());
    }
}
```