Achieve a multiline statement with operators *without* the semicolon inferer getting it wrong.
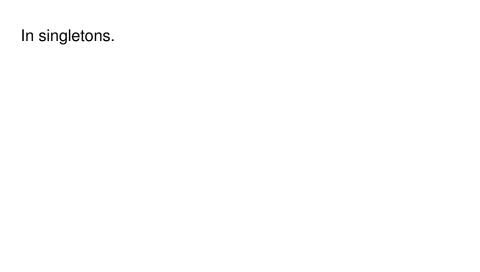
```
(x
+ y)
```

or

```
(x +
y)
```

Explain the rules of semicolon inference.

The end of the line is treaded as a semicolon unless
- the line ends with a word that it's a legal end of a statement,
like a period or infix operator.
- the next line starts with a word that can't start a statement.
- the line ends while in `(...)` or `[...]`.

Where do Java static methods go in Scala?

In singletons.

What are three reasons why the
`Application` trait is bad?

- It allows no access to command line arguments.
- Treading limitations make it bad for multithreaded programs.
- HotSpot doesn't optimize an object executed by the `Application` trait.

Describe the compile daemon.

Start and compile: `fsc`
Stop: `fsc -shutdown`

What do companion object and class have access to?

Each other's private members.

What is automatically imported into every
Scala program?

```
scala._
scala.Predef._
java.lang._
```

What can a singleton not do?

It cannot define a new Scala type, but it can still be an instance of a superclass, trait, or companion class.

What is a singleton object without a companion class called?

It's called a standalone object.

When does a method have a side effect?

If it mutates a state outside a method or performs i/o.

What is a companion object?

It's a singleton object with the same name as the class it shares a source file with.

When is a file a script?
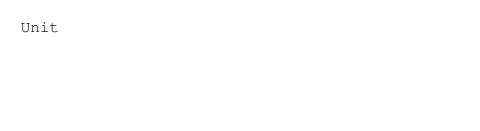
When it ends in a result expression.

What kind of variable are parameters?

They are `val`s.

Singleton objects have the initialization
semantics of what in Java?

Statics.

What in Scala is similar to Java's void return type?

Unit

What is the default visibility level in Scala?

Public. Achieved by leaving off the visibility modifier.

What is the program entry point?

A singleton object with `main` method that takes `Array[String]`.

The result type is irrelevant.

Describe a good caching data structure.

scala.collection.jcl.WeakHashMap

What happens if you leave off = before the function body?

The result type automatically becomes `Unit`.