

Achieve Java's package-private.

`private[X]` where `X` is the directly enclosing package.

What happens if `java.lang` and `scala` have  
a name colliding member?

The Scala member hides the Java one.

What's the problem with the protected members of singletons?

They make no sense because singletons have no subclasses.

Describe object-private.

```
private[this]
```

It's only accessible by this instance of a class, not others.



What are the major differences between Scala and Java packages?

- Scala's are hierarchical like Java's, but they also properly nest.
- Java's package statement in Scala is just syntactic sugar for

```
package X {  
    //compilation unit  
}
```

What's the difference between Scala and Java  
private?

Scala is more consistent, denying visibility to containing instances of nested classes.

What's the difference between Scala and Java  
protected modifier?

Scala gives only subclass access, not package members too.

Describe coupling.

It is the reliance of various parts of the program on one another.



Describe explicit Scala private.

`private[X]` where X is the containing class.

Achieve Java private.

`private[X]` where `X` is the outermost class.

Import selectors syntax.

In curly braces, allows

- Simple name.
- Renaming clause  $x \Rightarrow y$ .
- Hiding clause  $x \Rightarrow \_$ .
- catch-all  $\_$ , all members not in previous clauses, must be last.

You can leave off the curlies if only importing 4 or one of 1.

How do you make a Scala import of non-singleton object members?

When is it useful?

`import fruit._`, where `fruit` is the param to a method.

It's useful when you use objects as modules.



Name three ways to specify package name.

- From the normal root of the hierarchy.
- From `__root__` package to force absolute lookup when inner scope masks.
- Relative to current package.

Give the import selectors syntax.

In curly braces. allows:

- 1) Simple name.
- 2) Renaming clause  $x \Rightarrow y$
- 3) Hiding clause  $x \Rightarrow \_$
- 4) Catch-all  $\_$ , all members not in previous clauses, must be last.

You can leave off curlies if you're only importing #4 or one of #1.