

Define `Unit`.

An abstract final class that extends `AnyVal`.

Its only instance is `()`.

What compromises did Scala make for Java  
interop?

- Static overloading of methods.
- Both traits and classes.
- Inclusion of null.
- Huge number of static types (e.g., existential types).

Give a structural type example for parameter  
that defines a `getName` function.

```
def printName(namedObj: {def.getName(): String}) {  
    println(namedObj.getName())  
}
```

Describe `Nothing`.

A final trait that extends `Any`.

Subtype of every `Any`.

There are no instances of this type at all.



**Describe** `None`.

A case object that extends `Option[Nothing]`.

This represents non-existent values.

Describe `Nil`.

A case object extending `List [Nothing]`.

It can stand in as an empty `List` of any type.

Describe `Null` and `null`.

Final trait that extends `AnyRef`.

Subtype of `AnyRef`.

Its only instance is the `null` reference.