

### Features

- Singleton object: a class with a single instance.
- There is no static members for Scala, instead, Scala declare those members in singleton objects.
- Everything in Scala is a object, no matter it is a number or function. Java distinguishes primitive types (such as int vs. Integer, boolean vs. Boolean), and does not enable one to manipulate a function as a value.
- Scala lexer uses a longest match rule(greedy mode) for tokens
- Case classes differ from standard classes in following respects:
  - keyword **new** is not mandatory to create instances of case classes.
  - getter functions are automatically defined for the constructor parameters (still confusing)
  - default definitions for methods equals and hashCode are provided, which will work on the structure of the instances and not on their identity.
  -

### Scala Version Hello World

```
1 //Hello world for Scala
2 object HelloWorld {
3   def main(args : Array[String]) {
4     println("Hello World!")
5   }
6 }
```

### Interact with Java

```
1 //Scala can work with Java seamlessly, directly import the library from Java with more powerful import syntax
2 import java.util.{Data, DataFormat}
3 //Scala use the underscore(_) to represent every name in one package, not asterisk(*) because the asterisk is a valid Scala identifier
4 import java.util._
```