Olasunkanmi Olayinka – SEC01 (NUID 001512266)

Big Data System Engineering with Scala
Fall 2022
Assignment No. 0

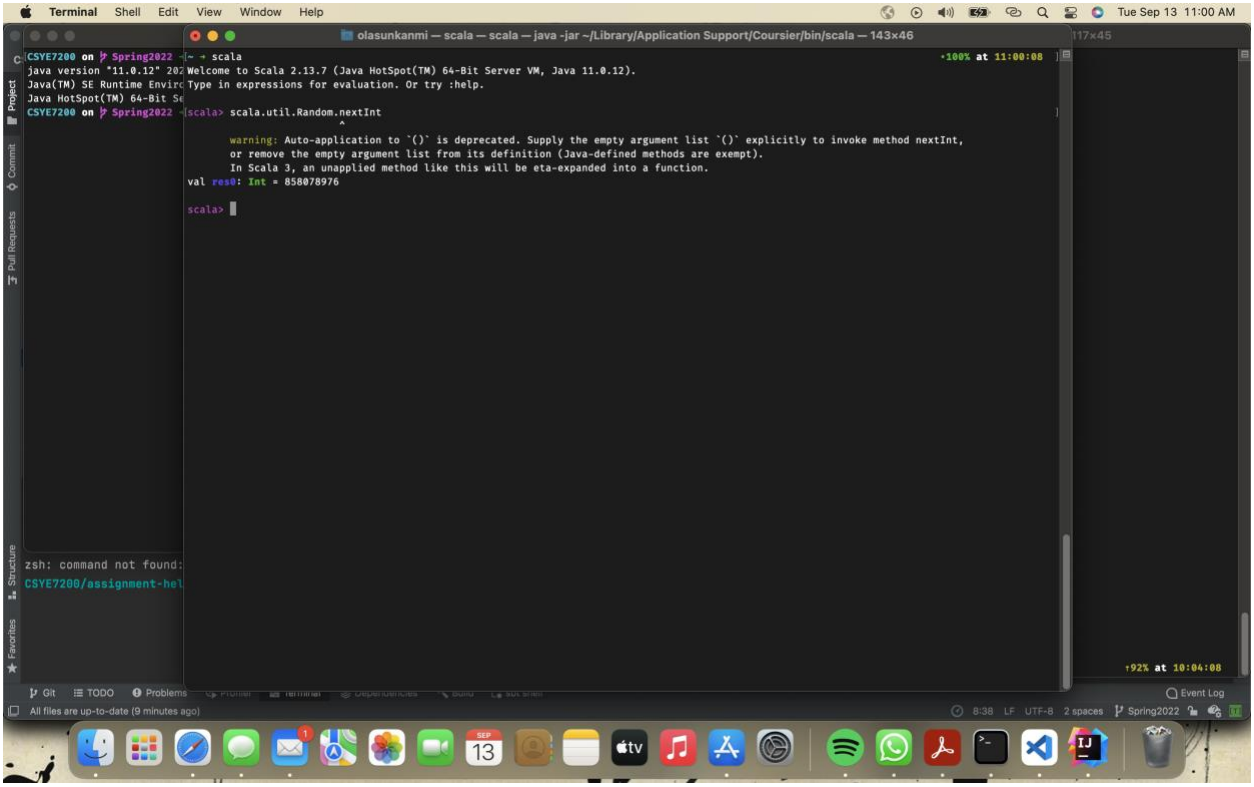
-List of Tasks Implemented

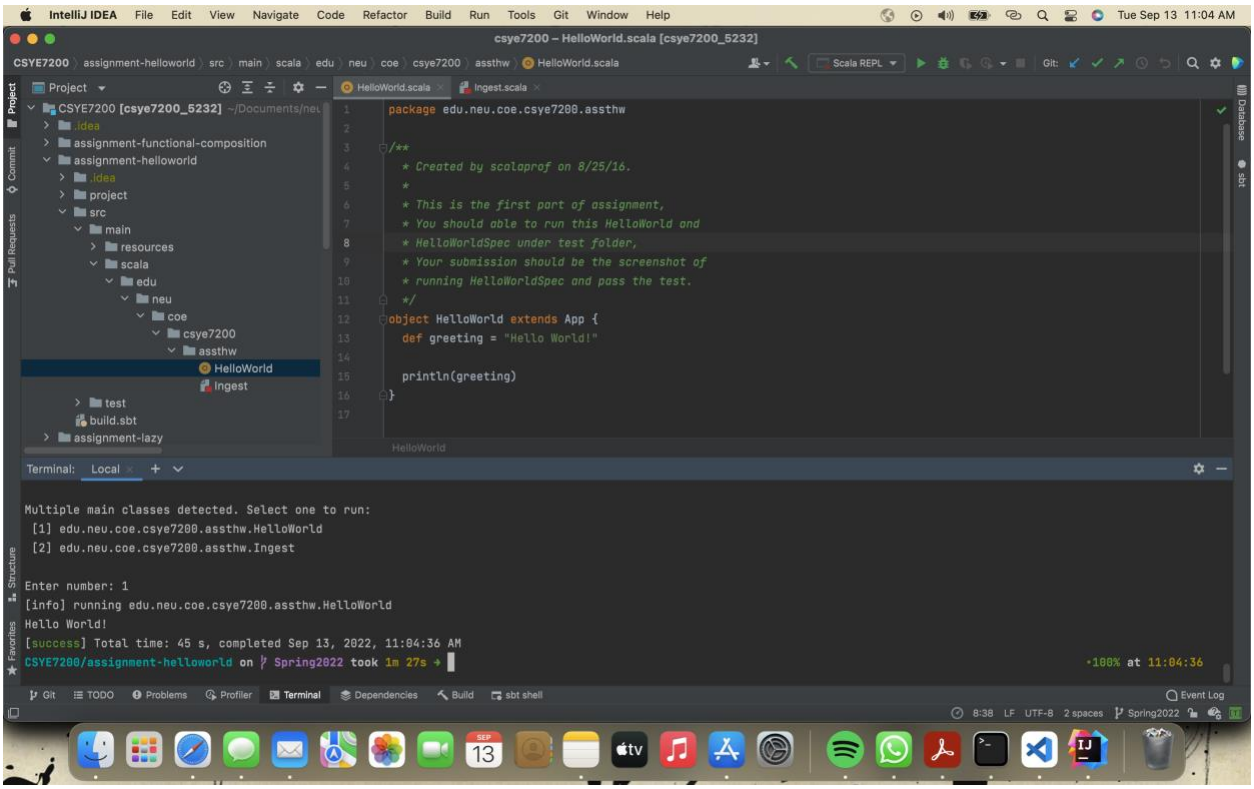
- Start compiling and running Scala, as well as using REPL
- Run Scala REPL in the command line and run “scala.util.Random.nextInt” to get a random number
- Clone class repository
- Run HelloWorld and Ingest.scala
- Modify Ingest.scala to get the number of movies produced in New Zealand

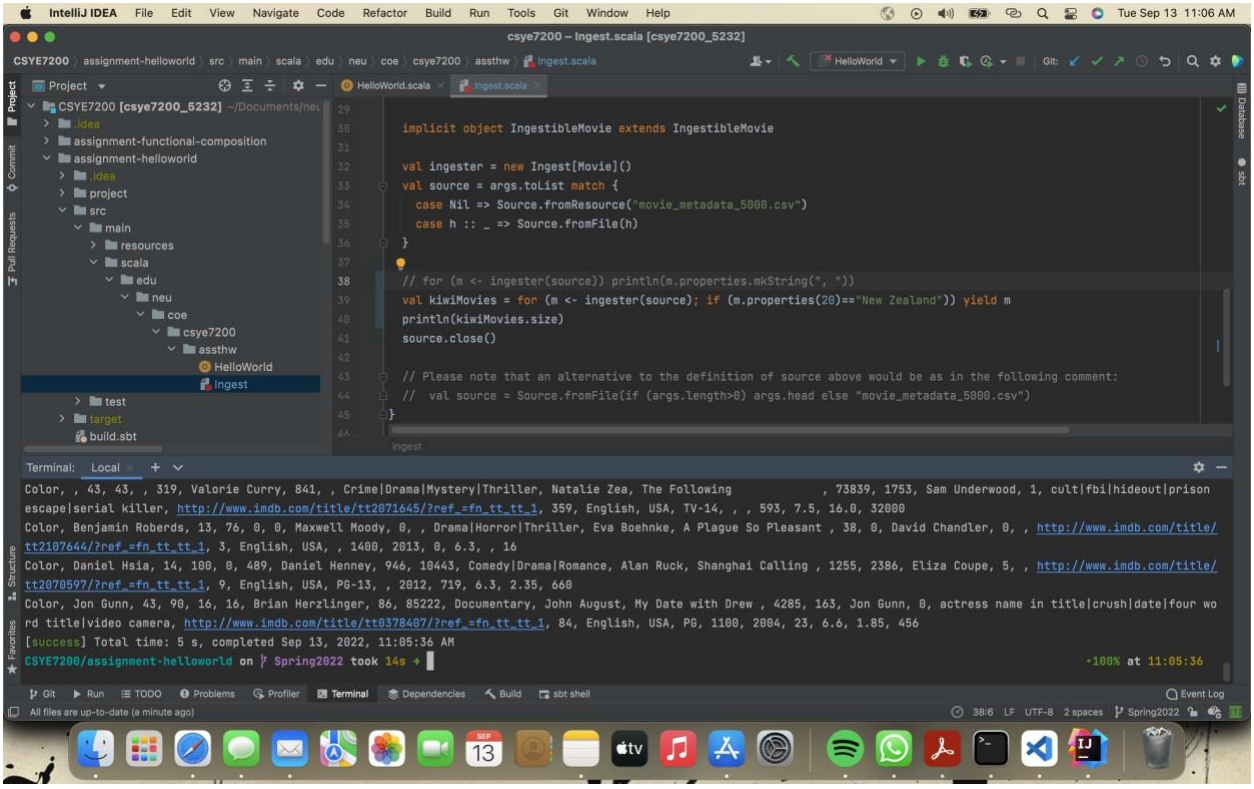
-Findings and analysis

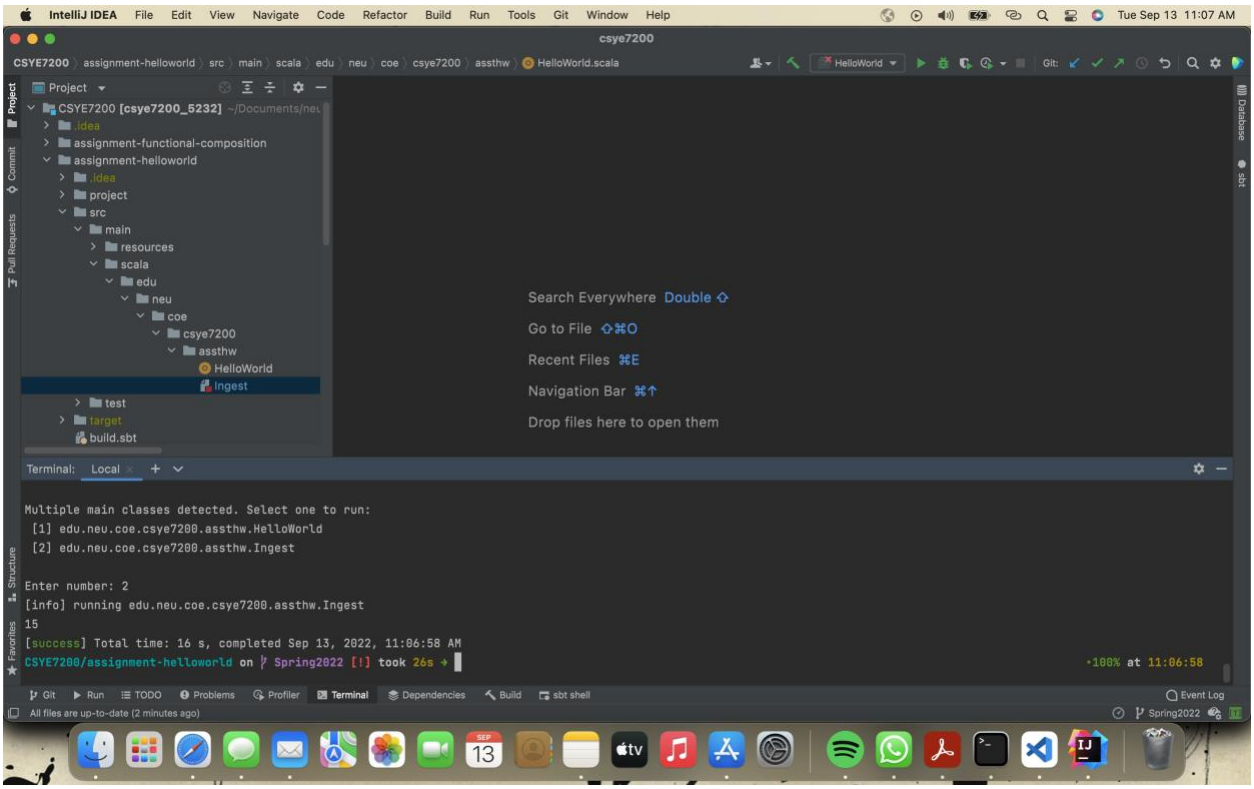
- The random number gotten is 858078976
- The number of movies produced in New Zealand is 15

-Code

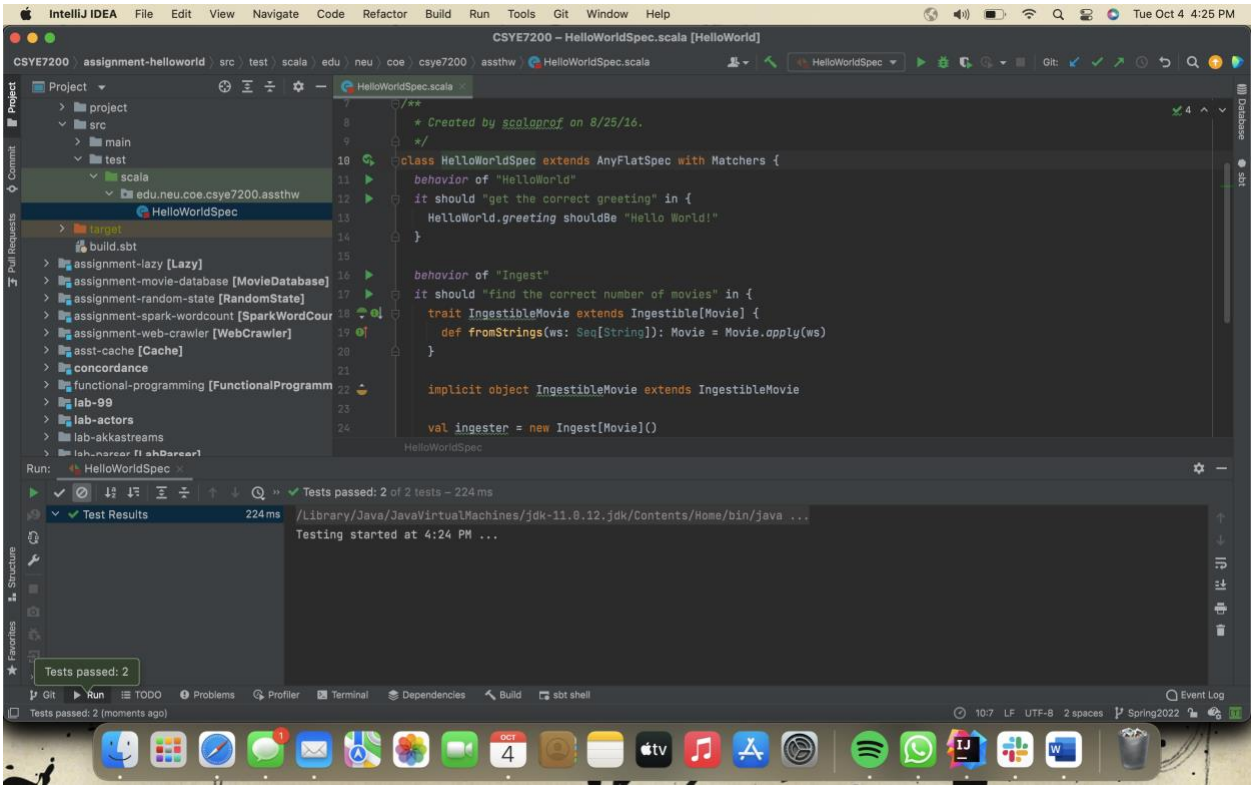



IntelliJ IDEA File Edit View Navigate Code Refactor Build Run Tools Git Window Help
Tue Sep 13 11:04 AM
csye7200 – HelloWorld.scala [csye7200_5232]
CSYE7200 assignment-helloworld src main scala edu neu coe csye7200 assthw HelloWorld.scala
Scala REPL
Project
CSYE7200 [csye7200_5232] ~/Documents/neu
.idea
assignment-functional-composition
assignment-helloworld
.idea
project
src
main
resources
scala
edu
neu
coe
csye7200
assthw
HelloWorld
Ingest
test
build.sbt
assignment-lazy
HelloWorld.scala
Ingest.scala
package edu.neu.coe.csye7200.assthw
/**
* Created by scalaprof on 8/25/16.
*
* This is the first part of assignment,
* You should able to run this HelloWorld and
* HelloWorldSpec under test folder,
* Your submission should be the screenshot of
* running HelloWorldSpec and pass the test.
*/
object HelloWorld extends App {
def greeting = "Hello World!"
println(greeting)
}
HelloWorld
Terminal: Local
Multiple main classes detected. Select one to run:
[1] edu.neu.coe.csye7200.assthw.HelloWorld
[2] edu.neu.coe.csye7200.assthw.Ingest
Enter number: 1
[info] running edu.neu.coe.csye7200.assthw.HelloWorld
Hello World!
[success] Total time: 45 s, completed Sep 13, 2022, 11:04:36 AM
CSYE7200/assignment-helloworld on Spring2022 took 1m 27s
100% at 11:04:36
Git TODO Problems Profiler Terminal Dependencies Build sbt shell
Event Log
8:38 LF UTF-8 2 spaces Spring2022


IntelliJ IDEA File Edit View Navigate Code Refactor Build Run Tools Git Window Help
Tue Sep 13 11:06 AM
csye7200 – Ingest.scala [csye7200_5232]
CSYE7200 assignment-helloworld src main scala edu neu coe csye7200 assthw Ingest.scala
HelloWorld
Project
CSYE7200 [csye7200_5232] ~/Documents/neu
.idea
assignment-functional-composition
assignment-helloworld
.idea
project
src
main
resources
scala
edu
neu
coe
csye7200
assthw
HelloWorld
Ingest
test
target
build.sbt
HelloWorld.scala
Ingest.scala
implicit object IngestibleMovie extends IngestibleMovie
val ingester = new Ingest[Movie]()
val source = args.toList match {
case Nil => Source.fromResource("movie_metadata_5000.csv")
case h :: _ => Source.fromFile(h)
}
// for (m <- ingester(source)) println(m.properties.mkString(", "))
val kiwiMovies = for (m <- ingester(source); if (m.properties(20)=="New Zealand")) yield m
println(kiwiMovies.size)
source.close()
// Please note that an alternative to the definition of source above would be as in the following comment:
// val source = Source.fromFile(if (args.length>0) args.head else "movie_metadata_5000.csv")
}
Ingest
Terminal: Local
Color, , 43, 43, , 319, Valorie Curry, 841, , Crime|Drama|Mystery|Thriller, Natalie Zea, The Following , 73839, 1753, Sam Underwood, 1, cult|fbi|hideout|prison escape|serial killer, http://www.imdb.com/title/tt2071645/?ref_=fn_tt_tt_1, 359, English, USA, TV-14, , , 593, 7.5, 16.0, 32000
Color, Benjamin Roberds, 13, 76, 0, 0, Maxwell Moody, 0, , Drama|Horror|Thriller, Eva Boehnke, A Plague So Pleasant , 38, 0, David Chandler, 0, , http://www.imdb.com/title/tt2107644/?ref_=fn_tt_tt_1, 3, English, USA, , 1400, 2013, 0, 6.3, , 16
Color, Daniel Hsia, 14, 100, 0, 489, Daniel Henney, 946, 10443, Comedy|Drama|Romance, Alan Ruck, Shanghai Calling , 1255, 2386, Eliza Coupe, 5, , http://www.imdb.com/title/tt2070597/?ref_=fn_tt_tt_1, 9, English, USA, PG-13, , 2012, 719, 6.3, 2.35, 660
Color, Jon Gunn, 43, 90, 16, 16, Brian Herzlinger, 86, 85222, Documentary, John August, My Date with Drew , 4285, 163, Jon Gunn, 0, actress name in title|crush|date|four word title|video camera, http://www.imdb.com/title/tt0378407/?ref_=fn_tt_tt_1, 84, English, USA, PG, 1100, 2004, 23, 6.6, 1.85, 456
[success] Total time: 5 s, completed Sep 13, 2022, 11:05:36 AM
CSYE7200/assignment-helloworld on Spring2022 took 14s
100% at 11:05:36
Git Run TODO Problems Profiler Terminal Dependencies Build sbt shell
Event Log
All files are up-to-date (a minute ago)
38:6 LF UTF-8 2 spaces Spring2022


IntelliJ IDEA File Edit View Navigate Code Refactor Build Run Tools Git Window Help
Tue Sep 13 11:07 AM
csye7200
Search Everywhere Double ⇧
Go to File ⇧⌘O
Recent Files ⌘E
Navigation Bar ⌘↑
Drop files here to open them
Terminal: Local
Multiple main classes detected. Select one to run:
[1] edu.neu.coe.csye7200.assthw.HelloWorld
[2] edu.neu.coe.csye7200.assthw.Ingest
Enter number: 2
[info] running edu.neu.coe.csye7200.assthw.Ingest
15
[success] Total time: 16 s, completed Sep 13, 2022, 11:06:58 AM
CSYE7200/assignment-helloworld on Spring2022 [!] took 26s
100% at 11:06:58

-Unit tests


IntelliJ IDEA File Edit View Navigate Code Refactor Build Run Tools Git Window Help
Tue Oct 4 4:25 PM
CSYE7200 – HelloWorldSpec.scala [HelloWorld]
class HelloWorldSpec extends AnyFlatSpec with Matchers {
behavior of "HelloWorld"
it should "get the correct greeting" in {
HelloWorld.greeting shouldBe "Hello World!"
behavior of "Ingest"
it should "find the correct number of movies" in {
trait IngestibleMovie extends Ingestible[Movie] {
def fromStrings(ws: Seq[String]): Movie = Movie.apply(ws)
implicit object IngestibleMovie extends IngestibleMovie
val ingester = new Ingest[Movie]()
Tests passed: 2 of 2 tests – 224 ms
Test Results 224 ms
Testing started at 4:24 PM ...
Tests passed: 2

- Result

Everything works fine.