Assginment 1
Part 1-1

```
[info] set current project to HelloWorld (in build file:/Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/)
[success] Total time: 0 s, completed Jan 30, 2021 10:05:59 PM
MacBook-Pro-2:assignment-helloworld lijianchao$ sbt test run
[info] welcome to sbt 1.4.0 (JetBrains s.r.o Java 1.8.0_152-release)
[info] loading global plugins from /Users/lijianchao/.sbt/1.0/plugins
[info] loading project definition from /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/project
[info] loading settings for project assignment-helloworld from build.sbt ...
[info] set current project to HelloWorld (in build file:/Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/)
[info] compiling 2 Scala sources to /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/target/scala-2.13/classes ...
[info] compiling 1 Scala source to /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/target/scala-2.13/test-classes ...
[info] HelloWorldSpec:
[info] HelloWorld
[info] - should get the correct greeting
[info] Ingest
[info] - should find the correct number of movies
[info] Run completed in 454 milliseconds.
[info] Total number of tests run: 2
[info] Suites: completed 1, aborted 0
[info] Tests: succeeded 2, failed 0, canceled 0, ignored 0, pending 0
[info] All tests passed.
[success] Total time: 6 s, completed Jan 30, 2021 10:08:33 PM

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: 20 s, completed Jan 30, 2021 10:08:52 PM
MacBook-Pro-2:assignment-helloworld lijianchao$
```
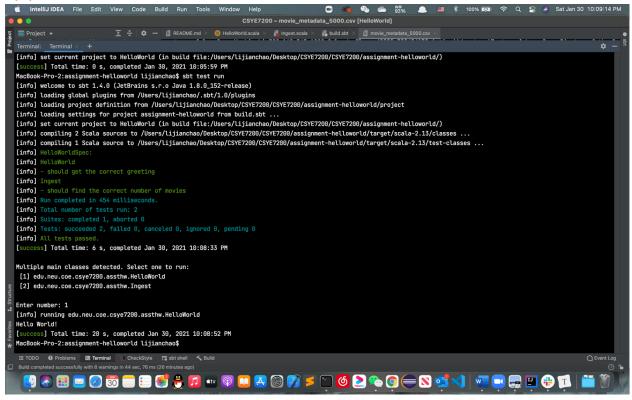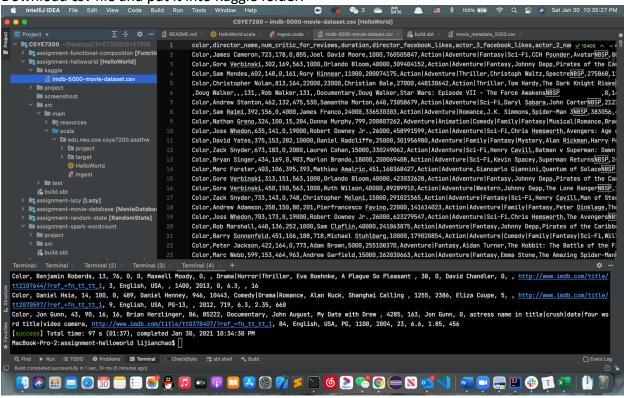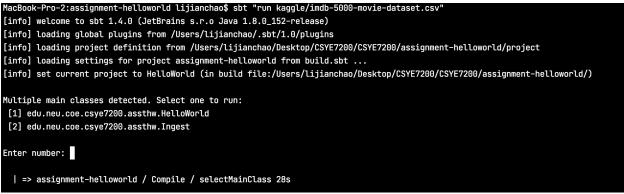
Part 1-2

```
MacBook-Pro-2:assignment-helloworld lijianchao$ sbt run
[info] welcome to sbt 1.4.0 (JetBrains s.r.o Java 1.8.0_152-release)
[info] loading global plugins from /Users/lijianchao/.sbt/1.0/plugins
[info] loading project definition from /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/project
[info] loading settings for project assignment-helloworld from build.sbt ...
[info] set current project to HelloWorld (in build file:/Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/)

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: 2 s, completed Jan 30, 2021 10:10:11 PM
```

Part 2-1

Download csv file and put it into Kaggle folder.

Part 2-2


```
MacBook-Pro-2:assignment-helloworld lijianchao$ sbt "run kaggle/imdb-5000-movie-dataset.csv"
[info] welcome to sbt 1.4.0 (JetBrains s.r.o Java 1.8.0_152-release)
[info] loading global plugins from /Users/lijianchao/.sbt/1.0/plugins
[info] loading project definition from /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/project
[info] loading settings for project assignment-helloworld from build.sbt ...
[info] set current project to HelloWorld (in build file:/Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/)

Multiple main classes detected. Select one to run:
 [1] edu.neu.coe.csye7200.assthw.HelloWorld
 [2] edu.neu.coe.csye7200.assthw.Ingest

Enter number:


 | => assignment-helloworld / Compile / selectMainClass 28s
```

```scala
val ingester = new Ingest[Movie]()
val source = args.toList match {
  case Nil => Source.fromResource("movie_metadata_5000.csv")
  //case Nil => Source.fromFile("assignment-helloworld/kaggle/imdb-5000-movie-dataset.csv")
  case h :: _ => Source.fromFile(h)
}
```

```
Color, Ash Baron-Cohen, 10, 98, 3, 152, Stanley B. Herman, 789, , Crime|Drama, Peter Greene, Bang , 438, 1186, James Noble, 1, corruption|homeless|homeless man|motorcycle|u
rban legend, http://www.imdb.com/title/tt0109266/?ref_=fn_tt_tt_1, 14, English, USA, , , 1995, 194, 6.4, , 20
Color, Shane Carruth, 143, 77, 291, 8, David Sullivan, 291, 424760, Drama|Sci-Fi|Thriller, Shane Carruth, Primer , 72639, 368, Casey Gooden, 0, changing the future|independ
ent film|invention|nonlinear timeline|time travel, http://www.imdb.com/title/tt0390384/?ref_=fn_tt_tt_1, 371, English, USA, PG-13, 7000, 2004, 45, 7.0, 1.85, 19000
Color, Neill Dela Llana, 35, 80, 0, 0, Edgar Tancangco, 0, 70071, Thriller, Ian Gamazon, Cavite , 589, 0, Qyynn Ton, 0, jihad|mindanao|philippines|security guard|squatter,
http://www.imdb.com/title/tt0428303/?ref_=fn_tt_tt_1, 35, English, Philippines, Not Rated, 7000, 2005, 0, 6.3, , 74
Color, Robert Rodriguez, 56, 81, 0, 6, Peter Marquardt, 121, 2040920, Action|Crime|Drama|Romance|Thriller, Carlos Gallardo, El Mariachi , 52055, 147, Consuelo Gómez, 0, ass
assin|death|guitar|gun|mariachi, http://www.imdb.com/title/tt0104815/?ref_=fn_tt_tt_1, 130, Spanish, USA, R, 7000, 1992, 20, 6.9, 1.37, 0
Color, Anthony Vallone, , 84, 2, 2, John Considine, 45, , Crime|Drama, Richard Jewell, The Mongol King , 36, 93, Sara Stepnicka, 0, jewell|mongol|nostradamus|stepnicka|vall
one, http://www.imdb.com/title/tt0430371/?ref_=fn_tt_tt_1, 1, English, USA, PG-13, 3250, 2005, 44, 7.8, , 4
Color, Edward Burns, 14, 95, 0, 133, Caitlin FitzGerald, 296, 4584, Comedy|Drama, Kerry Bishé, Newlyweds , 1338, 690, Daniella Pineda, 1, written and directed by cast membe
r, http://www.imdb.com/title/tt1880418/?ref_=fn_tt_tt_1, 14, English, USA, Not Rated, 9000, 2011, 205, 6.4, , 413
Color, Scott Smith, 1, 87, 2, 318, Daphne Zuniga, 637, , Comedy|Drama, Eric Mabius, Signed Sealed Delivered , 629, 2283, Crystal Lowe, 2, fraud|postal worker|prison|theft|t
rial, http://www.imdb.com/title/tt3000844/?ref_=fn_tt_tt_1, 6, English, Canada, , , 2013, 470, 7.7, , 84
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 wo
rd 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: 97 s (01:37), completed Jan 30, 2021 10:34:30 PM
MacBook-Pro-2:assignment-helloworld lijianchao$
```

Part2-3

```scala
  //case Nil => Source.fromFile("assignment-helloworld/kaggle/imdb-5000-movie-dataset.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")
}
```

```
MacBook-Pro-2:assignment-helloworld lijianchao$ sbt "run kaggle/imdb-5000-movie-dataset.csv"
[info] welcome to sbt 1.4.0 (JetBrains s.r.o Java 1.8.0_152-release)
[info] loading global plugins from /Users/lijianchao/.sbt/1.0/plugins
[info] loading project definition from /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/project
[info] loading settings for project assignment-helloworld from build.sbt ...
[info] set current project to HelloWorld (in build file:/Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/)
[info] compiling 1 Scala source to /Users/lijianchao/Desktop/CSYE7200/CSYE7200/assignment-helloworld/target/scala-2.13/classes ...

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 kaggle/imdb-5000-movie-dataset.csv

15
[success] Total time: 6 s, completed Jan 30, 2021 10:37:26 PM
MacBook-Pro-2:assignment-helloworld lijianchao$
```