This is your pre-class assignment. There are no points at stake but I want you to be able to start compiling and running Scala, as well as using the REPL before class begins.

**Part 1**

First, make sure you have a Java 11 JDK (or later). Load the *required* Scala tools listed in Resources. The assignments will all be based on 2.13.6 so that's the version I would like you to install.

Once you have done all that, run the "REPL" (type "scala" into your command line) and enter the following:

    scala.util.Random.nextInt

Note the result and be ready to submit it once you have everything. The assignment is due before the first class. If you are having trouble with the REPL, you can do the same thing with the IDE, Scastie or Scalafiddle (see Resources).

For the IDE, I strongly recommend IntelliJ/IDEA. You may be more familiar with Eclipse, but the Scala support in Eclipse has dropped off recently. "Everyone" uses IntelliJ (although feel free to look on the Scala web site--see below--to choose a different IDE such as Metals--but if you do that, you're on your own for help with building stuff).

In any case, all the information you need for installing and using Scala is at this URL which you should bookmark: [https://www.scala-lang.org (Links to an external site.)](https://www.scala-lang.org/)

**Part 2**

Now, I want you to do a little coding in your IDE. For that, you should clone the [CSYE7200 repository (Links to an external site.)](https://github.com/rchillyard/CSYE7200.git). When you try to build this, there will be a lot of compiler errors because there is code that you need to complete for the various assignments. What I suggest you do is to use the IDE to temporarily disable all the modules except that one you're working on. To begin with, that is *HelloWorld* (assignment-helloworld). You can do this by going into the File/Project Structure menu and simply removing the modules you don't need. The source code will still be on your machine, but IDEA won't try to compile and build those modules. Also, at any time, you can mark individual source files as "Plain Text" so that it doesn't stop you running.

Now that you have the code and tools that you need, please follow these instructions:

In addition to using IDE (and, indirectly, the SBT: simple build tool), you should make sure that you have sbt loaded on your system and can run it. You can get an sbt shell with IDEA (*View/Tool Windows/sbt shell*) or you can simply get a terminal window (*View/Tool Windows/Terminal*). For this exercise, it's simples to get a terminal window and cd to assignment-helloworld. Then you should be able to run it simply by typing *sbt run*. You will be asked which main program you wish to run: choose HelloWorld.

Now, go and do the same thing with the IDE itself by right-clicking on the name of the HelloWorld module (in the project view), and choosing Run HelloWorld. If this Run option doesn't show up, it means that you haven't built the module yet. This normally happens automatically, but if it doesn't the IDE is quite helpful with diagnosing the problem. You may need to explicitly set up the JDK and/or the Scala SDK.

I wish I could give you a one-step solution for all of this, but it doesn't seem to be possible.

Next... go to the Ingest.scala file in the same directory as HelloWorld and run it in the same way. You should see a very long listing of Movie database data.

Edit Ingest.scala thus (line 38) replacing the line as shown with the following line:

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)

Note that you are now using a "for comprehension" with "yield." This time, it will just give you the number of movies produced in New Zealand.

Note that number and, together with the random number that you got in the first part, submit your answers.

Enjoy!