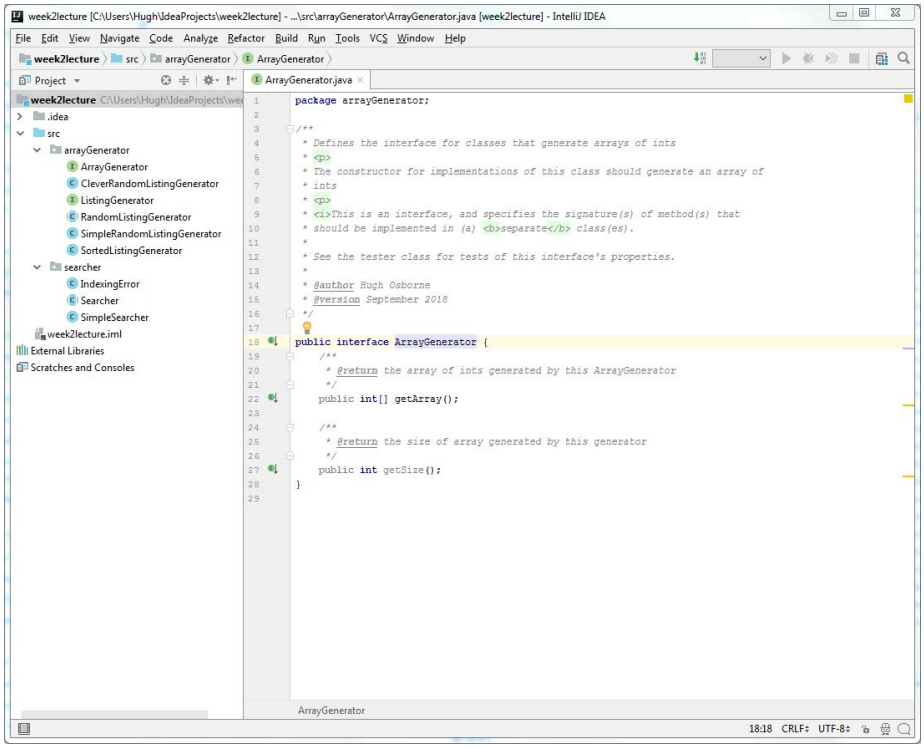
JUnit tests in IntelliJ

October 1, 2018

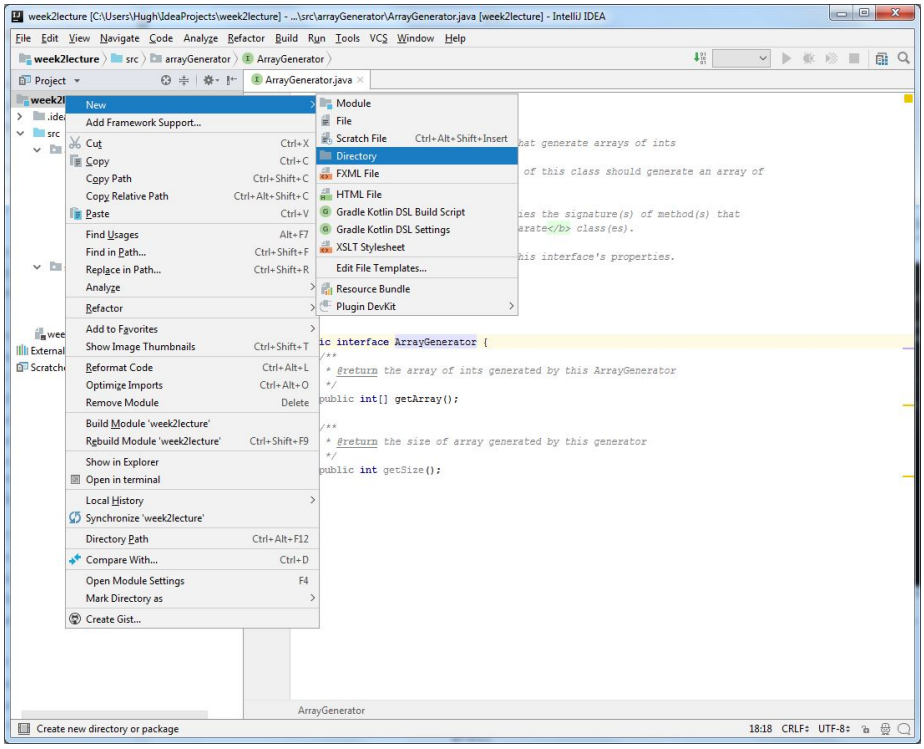
JUnit

There will be other ways of setting up JUnit tests in IntelliJ, but the following should work.

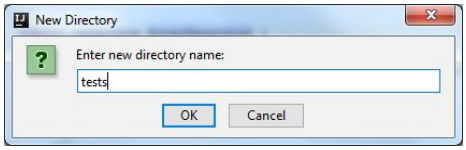
1. Open a project



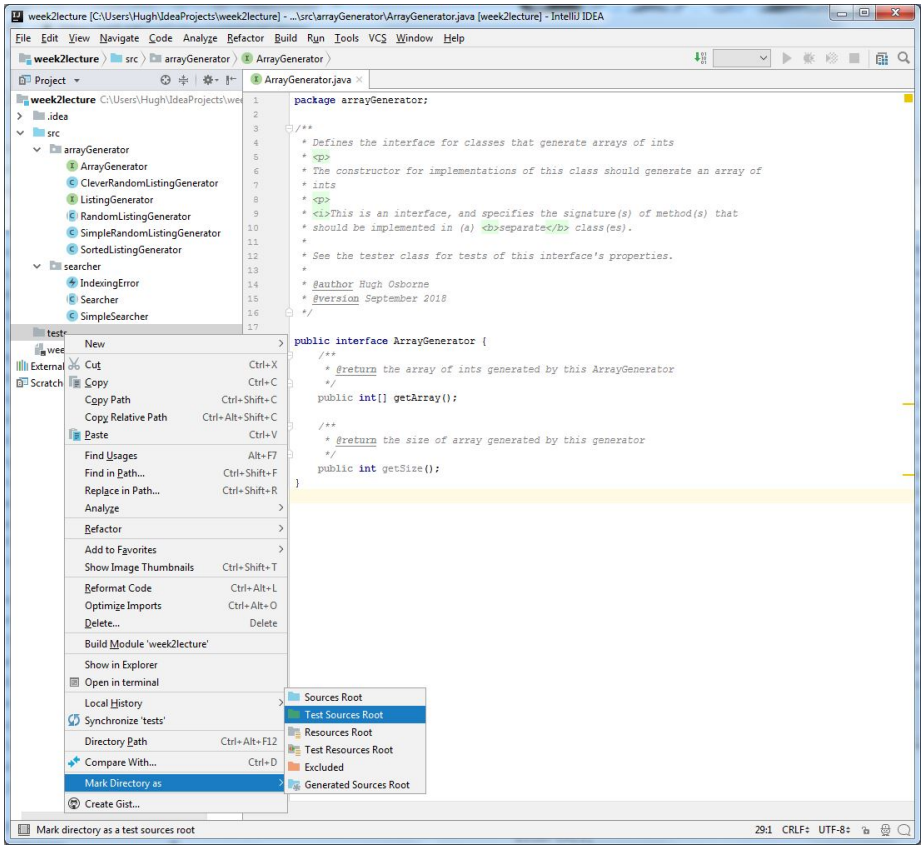
2. Right click on the project name, and select "New"→"Directory" to create a new folder.



3. Let's call this folder "tests".

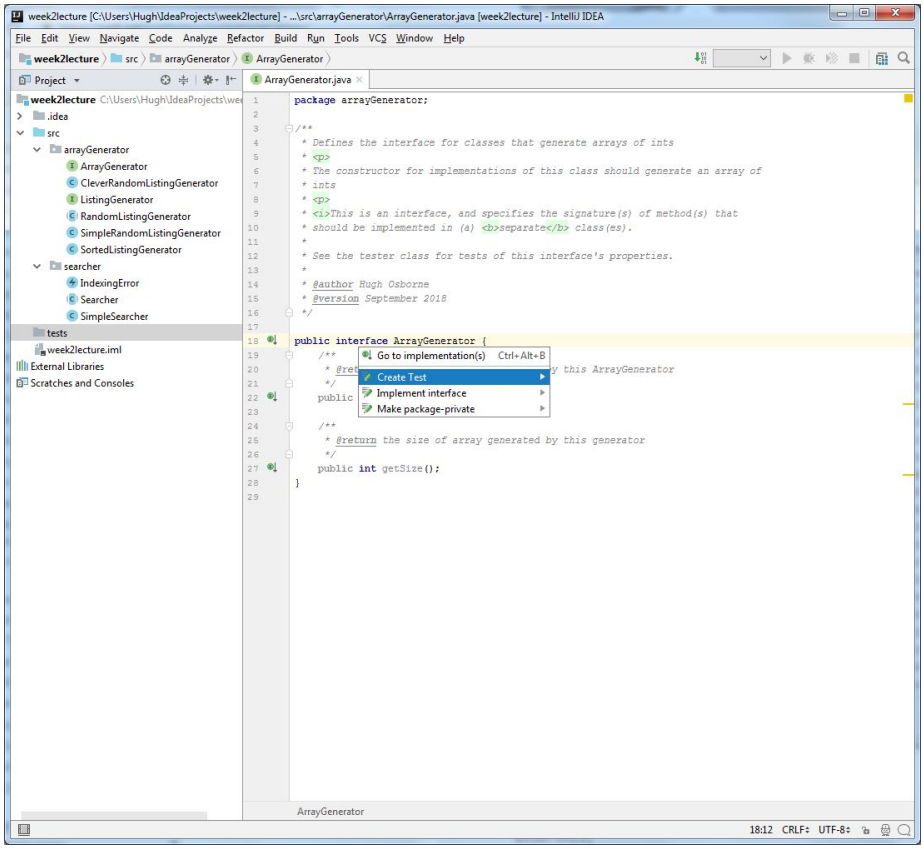


4. We now want to set the folder type to "Test Sources Root". Right click on the folder, select "Mark Directory as"→"Test Sources Root".

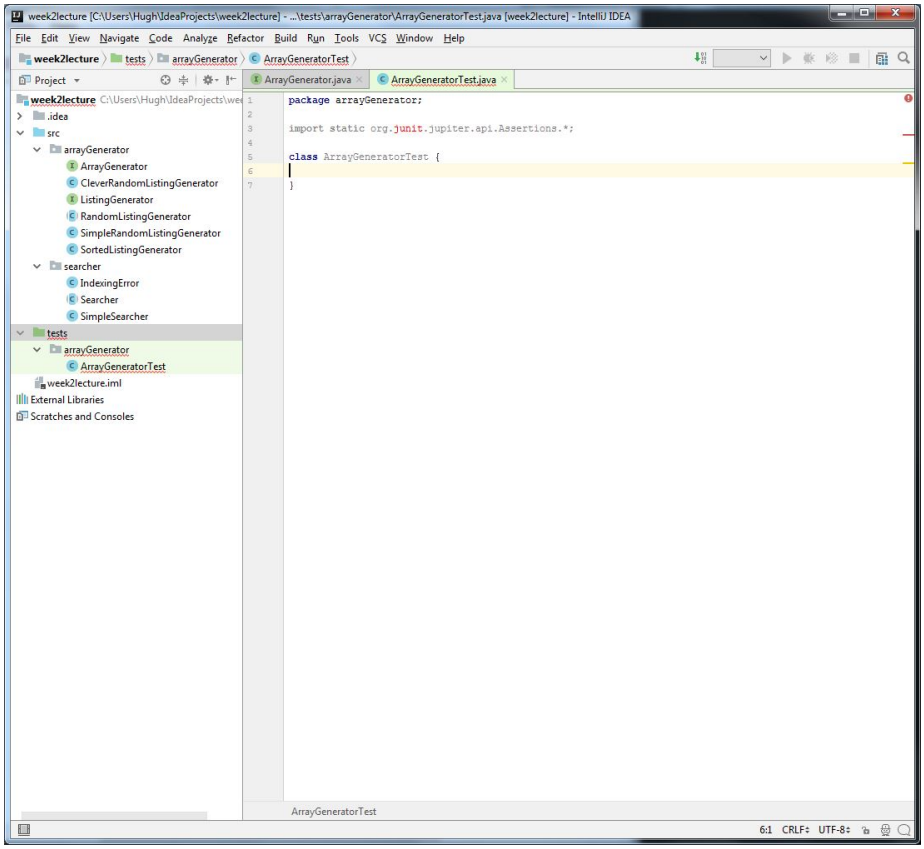


The change in folder type will be reflected in a change of colour of the folder's icon.

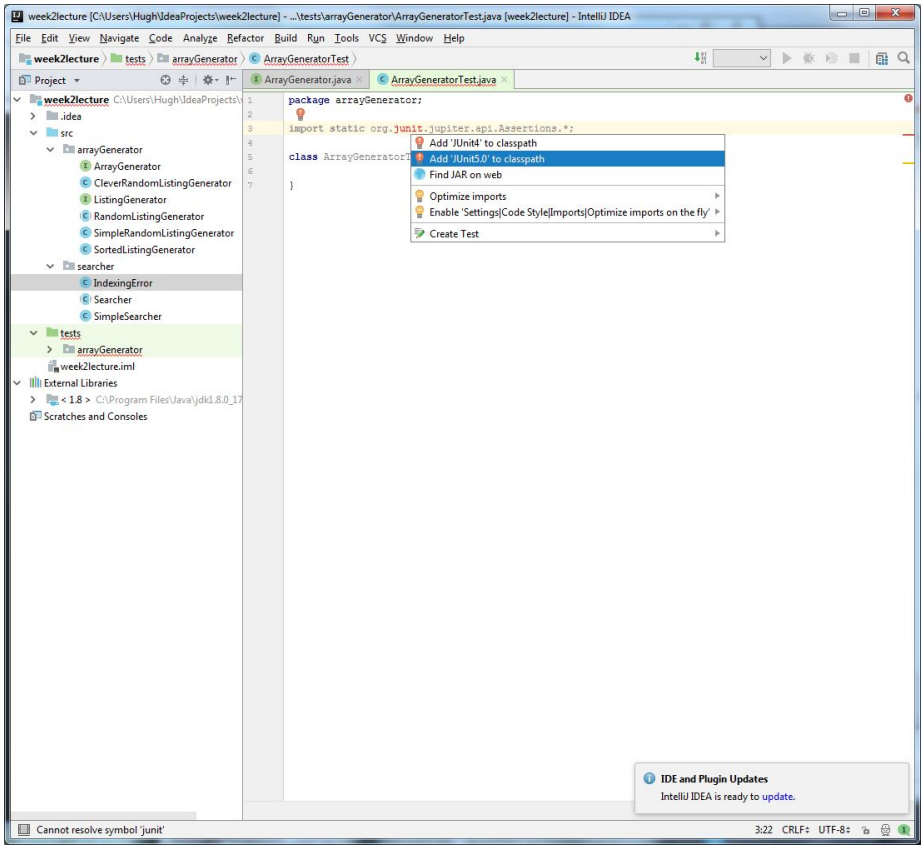
5. Now we create a test case for one of the classes in the project. Open one of the classes. Place the cursor on the class signature (in this example, where it says `public interface ArrayGenerator`). Press **Alt**+**Enter**. You should get a pop-up window with the option of "Create Test". Select this option.



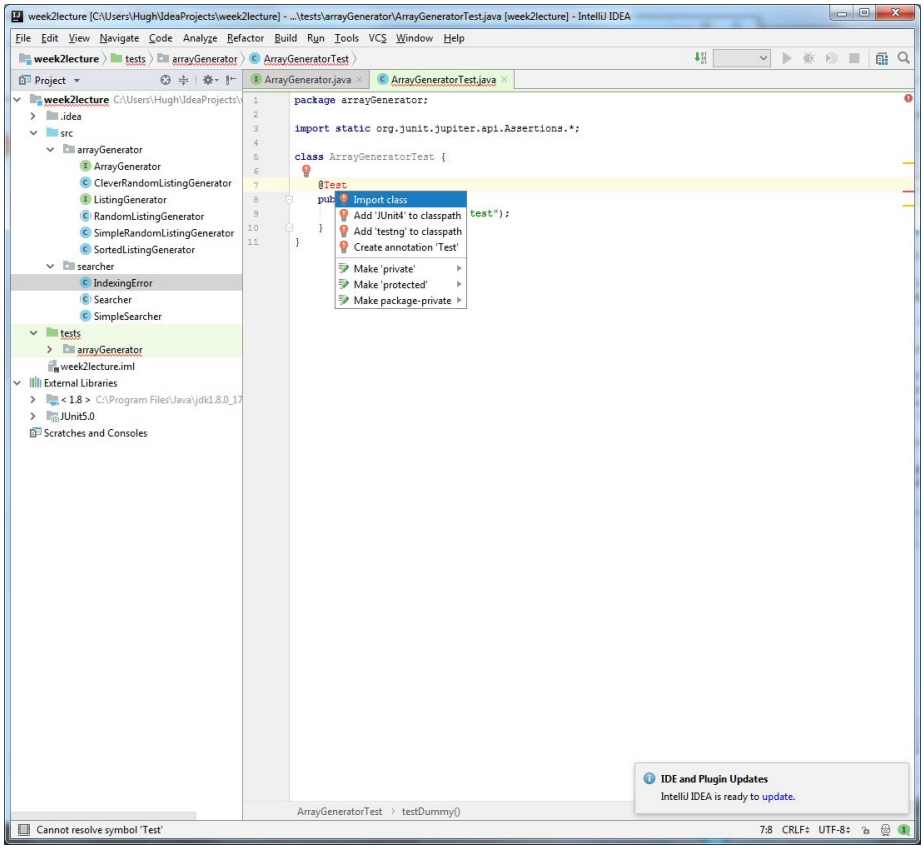
6. IntelliJ should automatically create a folder structure in the `tests` folder reflecting the structure in which our chosen class appears in the `src` folder.



7. The `junit` in the import path may be highlighted in red. Place the cursor there, press **Alt**+**Enter**. You should get a pop-up window with the option of adding JUnit5 to the class path. Select this option.



8. You can create individual test methods by preceding them with the "`@Test`" annotation. Again, this may be highlighted in red. If so, place the cursor over it, press **Alt+Enter**, and select "Import class".

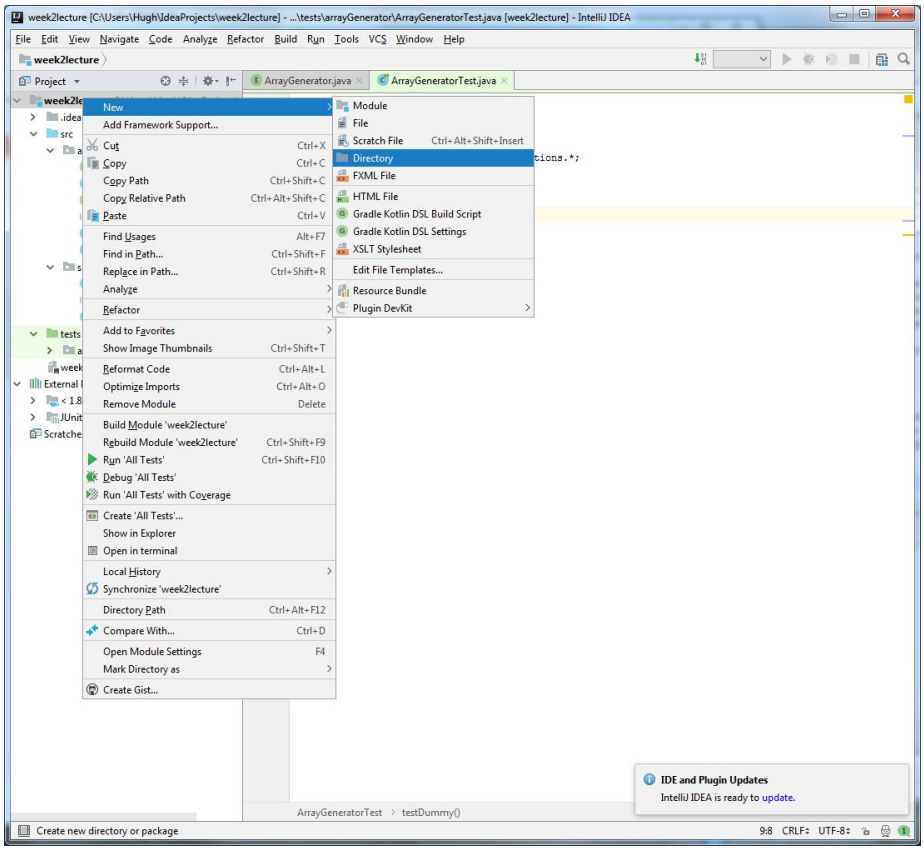


That's it.

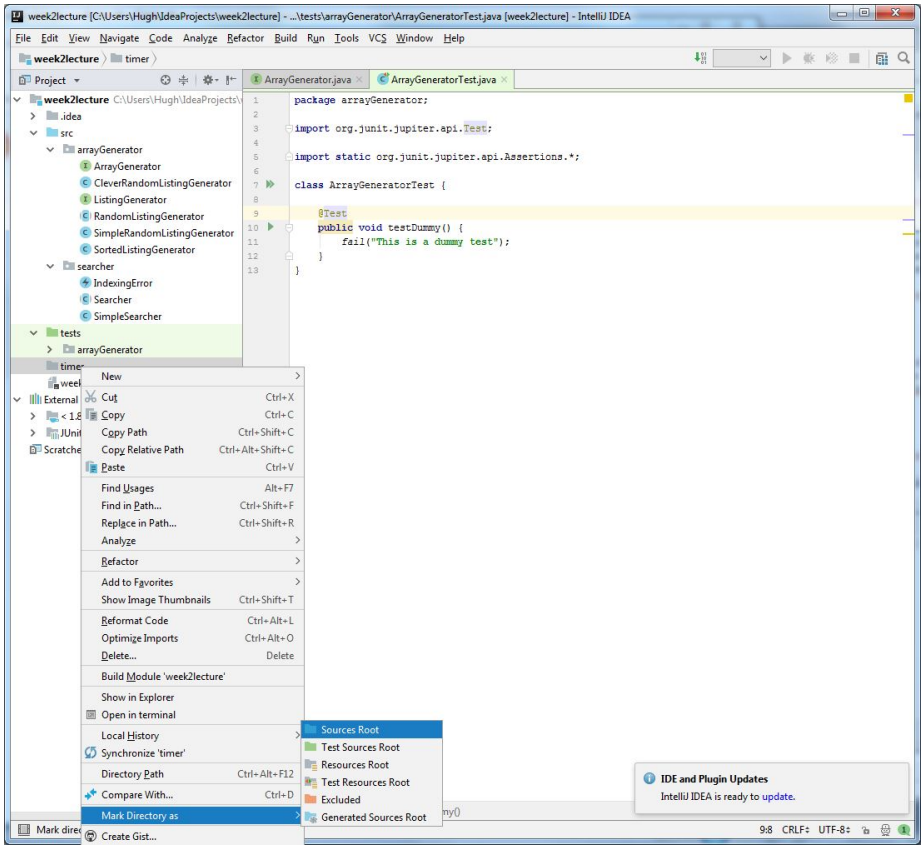
Timers

Approximately the same process works for timers. However, since the `timer` interface is one that I have defined, rather than built in to Java and IntelliJ, you have to be a bit more hands on.

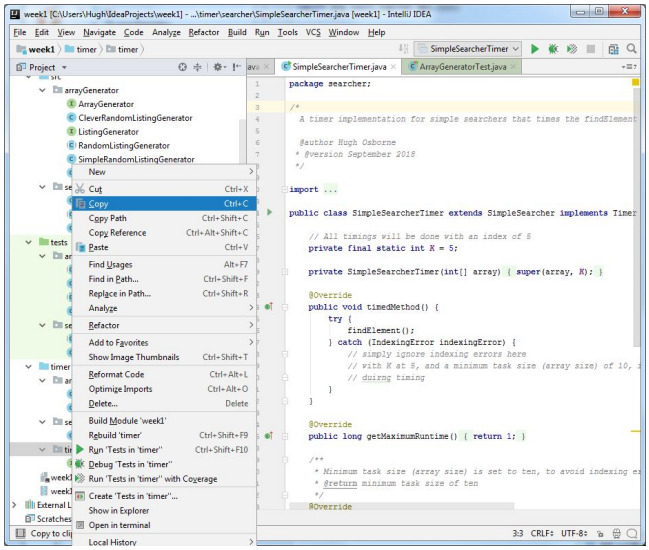
1. Create a timer folder.

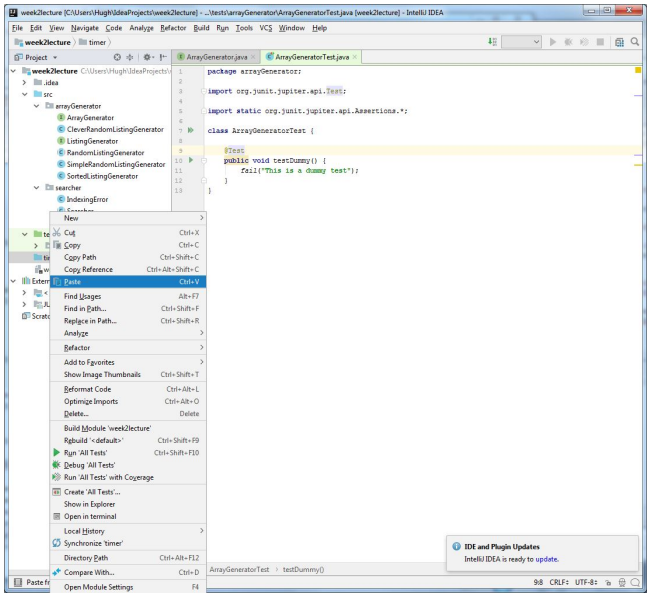


2. Set the folder type to “Sources Root”.

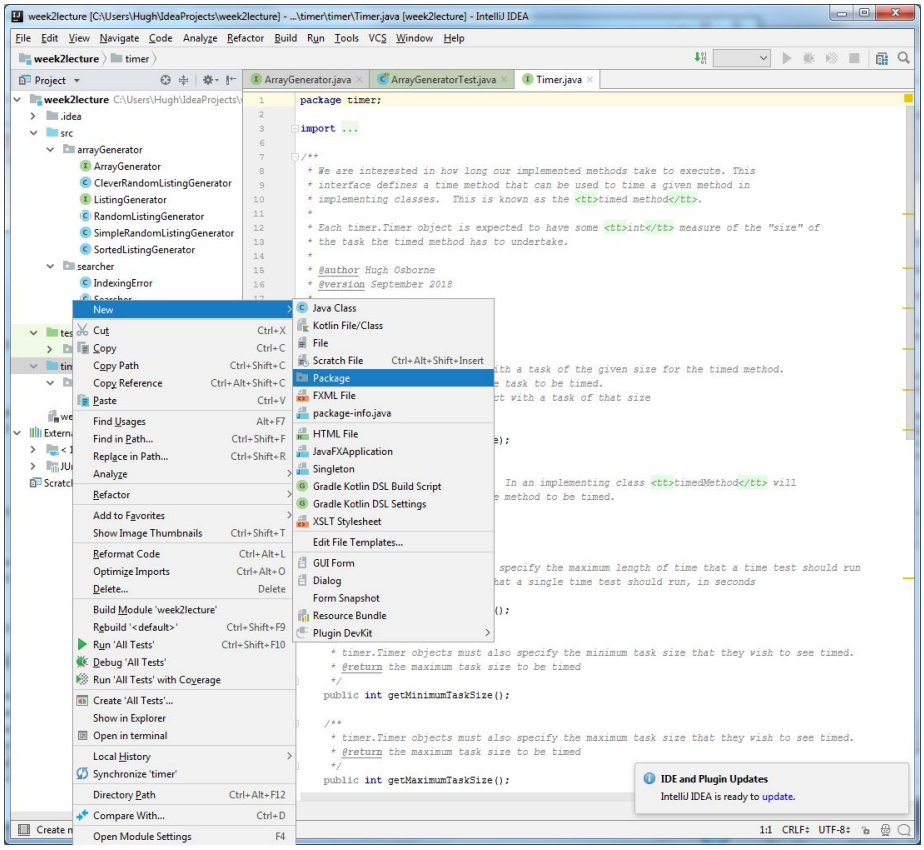


3. You will need to copy the `timer` package, with the `Timer` interface in it from some other project into the new timer folder.

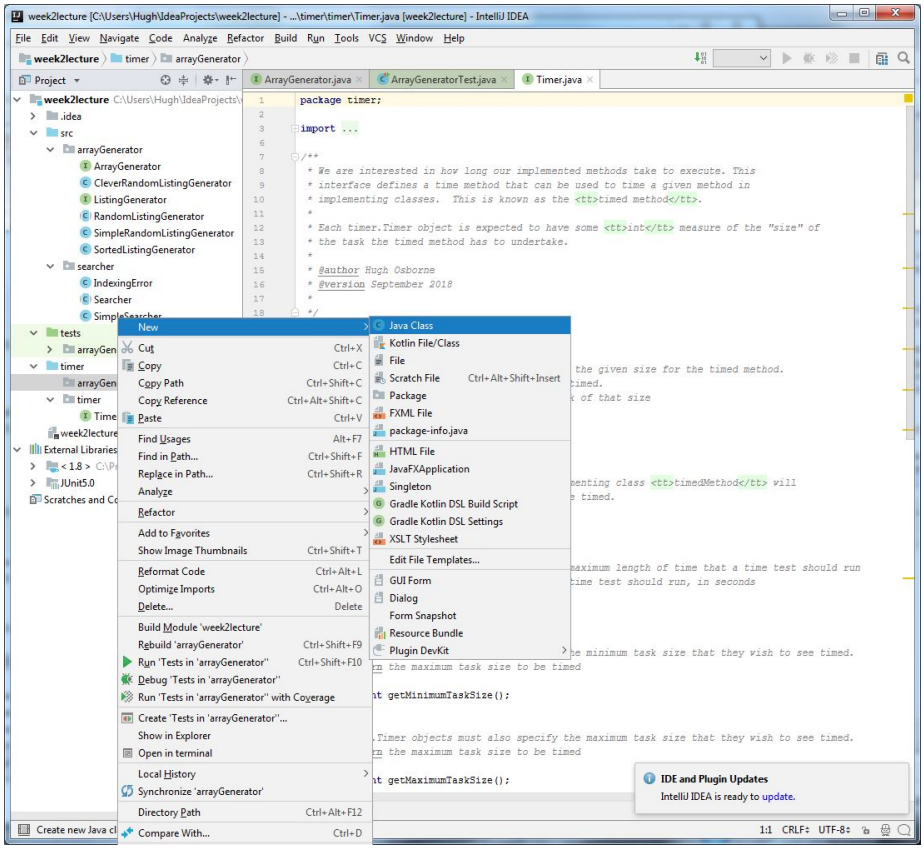




4. This time, you explicitly need to create the folder structure, rather than expecting IntelliJ to do it for you. Right click on the `timer` folder, and select "New" → "Package". In this example, call the package `arrayGenerator`.



5. You can now create timer classes in this package. Right click the package, and select "New"→"Java Class".



6. You can now add your timer code to this class.