

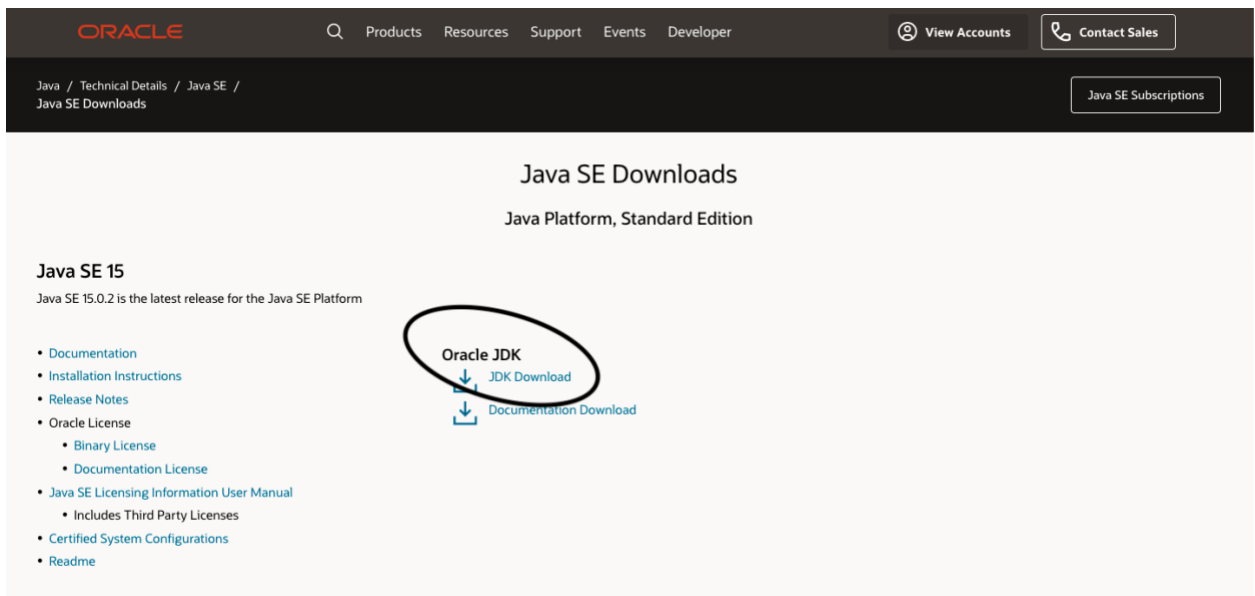
Tutorial For setting up the Framework

Requirements:

1. Java JDK 8 (0.8) or newer
2. IntelliJ Idea Community Edition
3. Internet Access

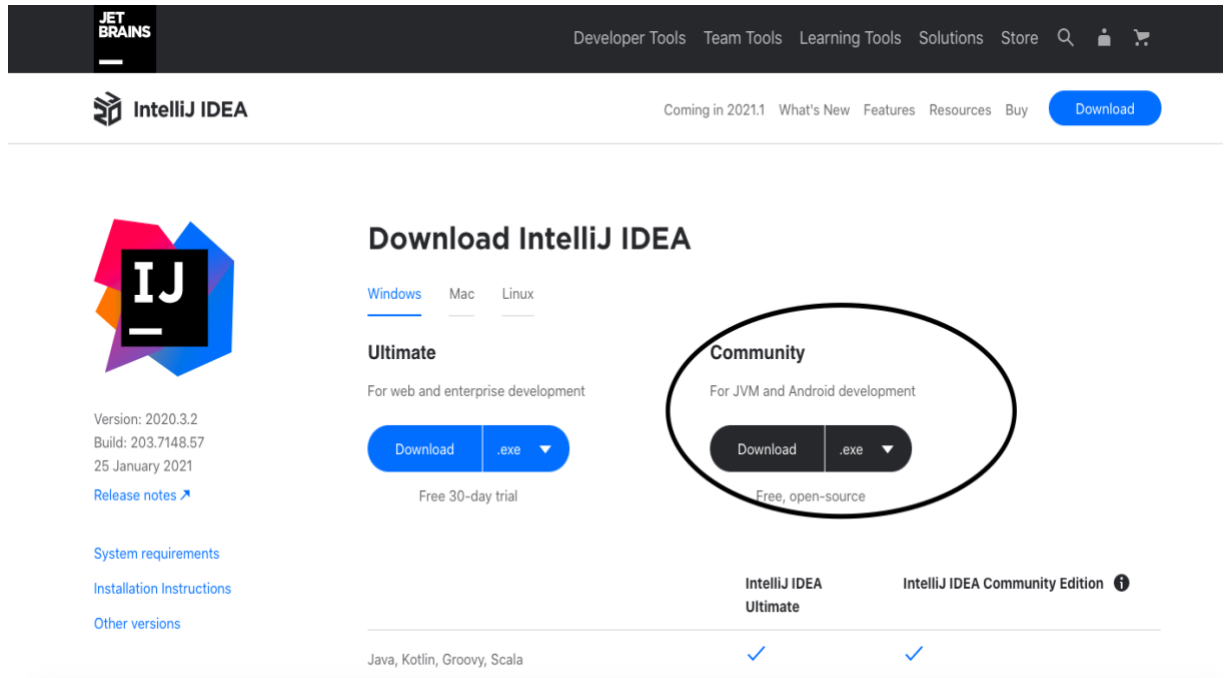
Steps:

1. Go to Oracle's download page and download the Oracle JDK.

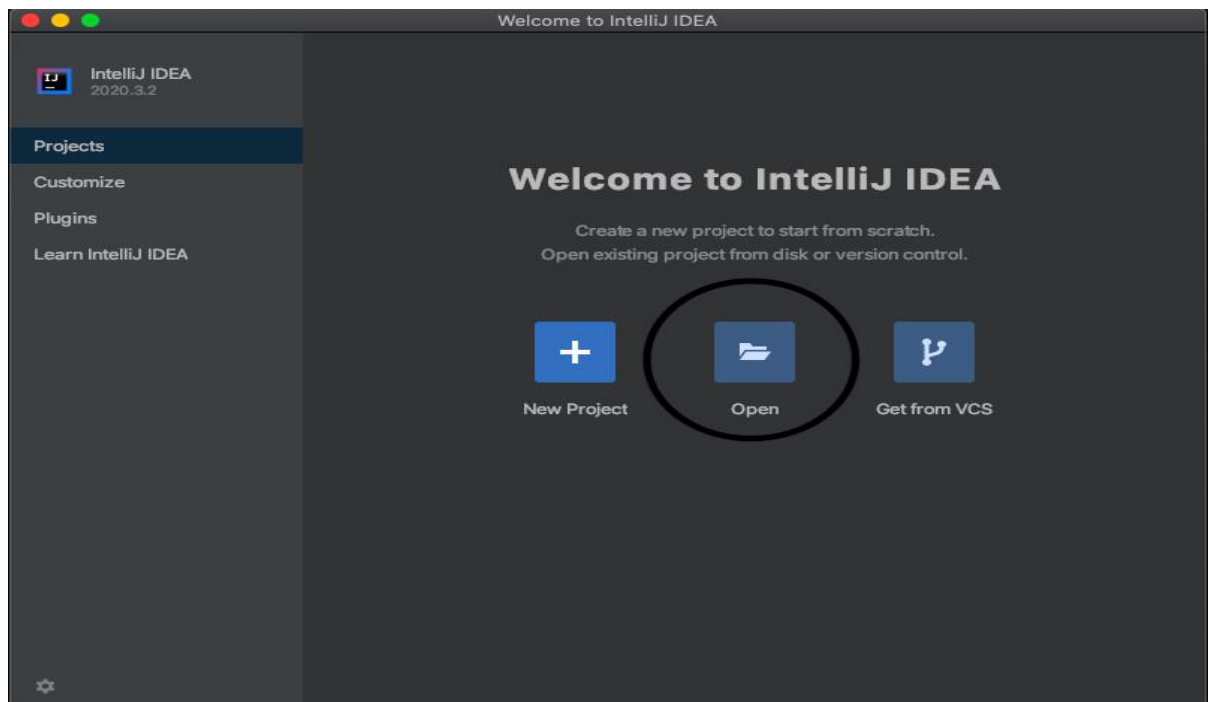


2. Accept license and download JDK for your operating system
3. Install JDK.

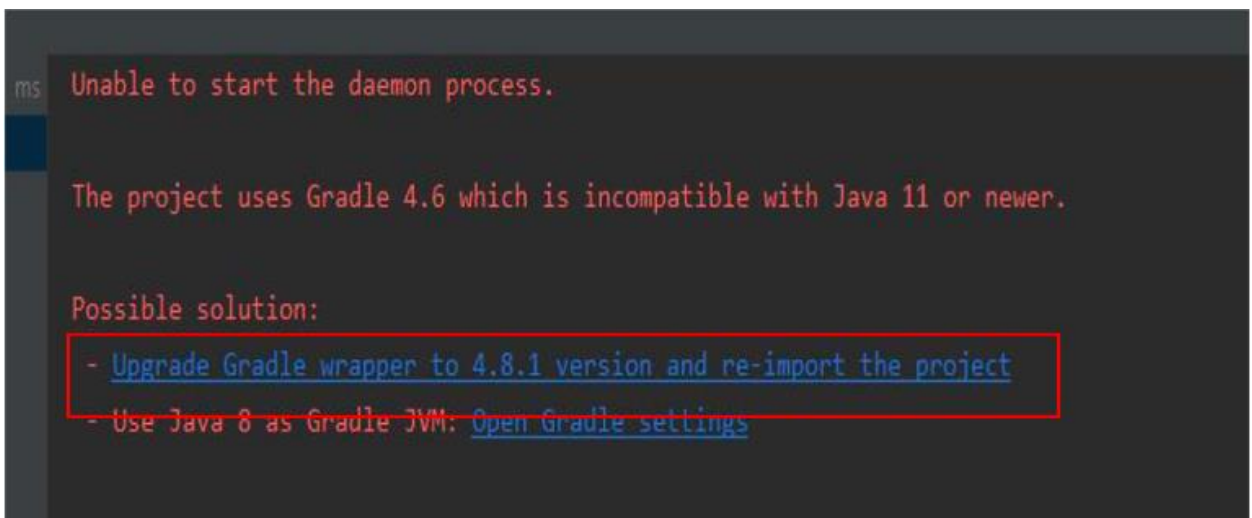
4. Go to [IntelliJ Idea download page](#) and download the community edition of the software.



5. Install IntelliJ Idea Community Edition.
6. Open IntelliJ Idea and click Open

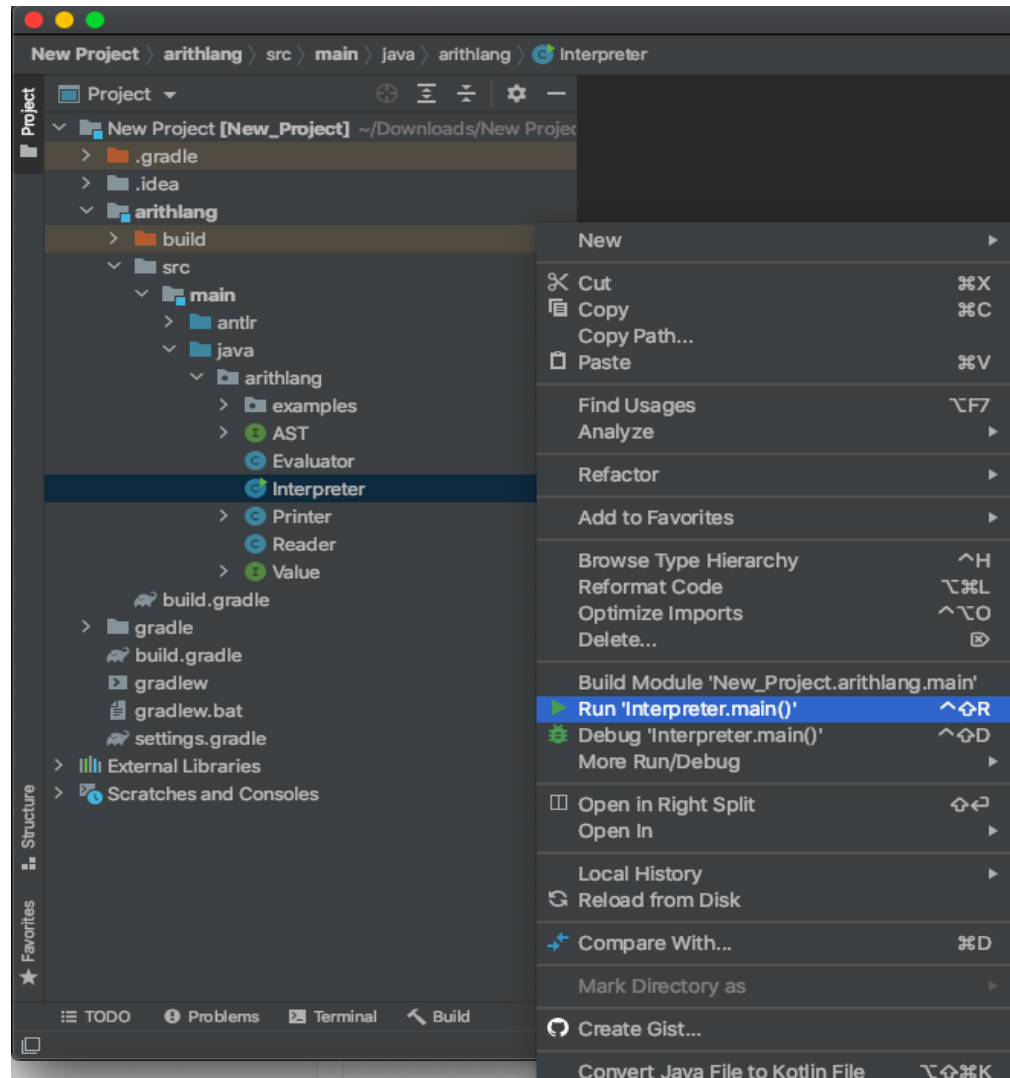


7. Unzip the file and select the folder. The folder must have the folder arithlang and other files in it.
8. Select the folder and Click Open then IntelliJ Idea will download all the dependencies and the build system. Wait few minutes for that.
9. (Optionally) You may find an error message as follows, please select “Upgrade Gradle wrapper to 4.8.1 version (updated version) and re-import the project”.

A screenshot of an IntelliJ IDEA error message. The background is dark gray. The text is in a light gray font. The error message is: "Unable to start the daemon process." followed by "The project uses Gradle 4.6 which is incompatible with Java 11 or newer." Below this, it says "Possible solution:" and then lists two options: "- Upgrade Gradle wrapper to 4.8.1 version and re-import the project" and "- Use Java 8 as Gradle JVM. Open Gradle settings". The first option is highlighted with a red rectangular box.

```
ms Unable to start the daemon process.  
  
The project uses Gradle 4.6 which is incompatible with Java 11 or newer.  
  
Possible solution:  
- Upgrade Gradle wrapper to 4.8.1 version and re-import the project  
- Use Java 8 as Gradle JVM. Open Gradle settings
```

10. To run the interpreter, right click on the interpreter java file and click run Interpreter.main()



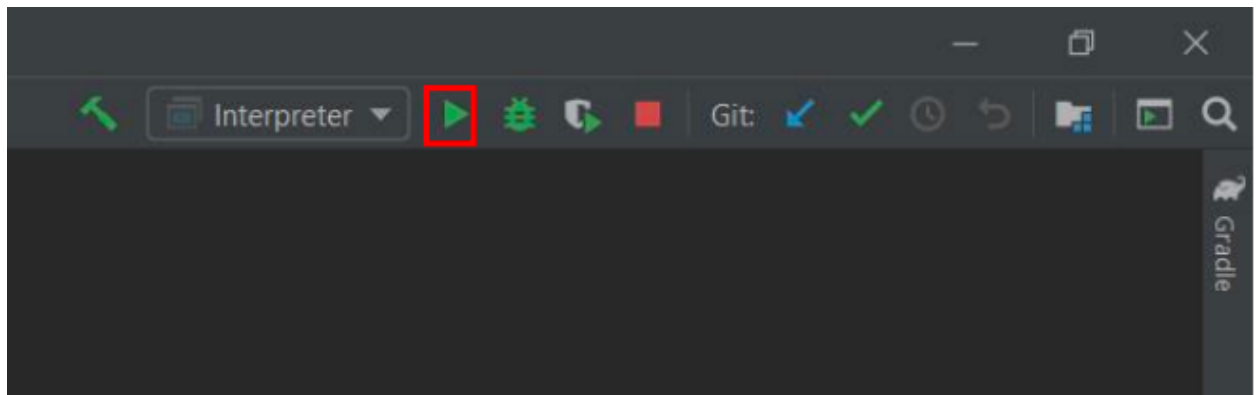
11. A console will be open on the bottom of IntelliJ Idea and you can follow the instructions it says.



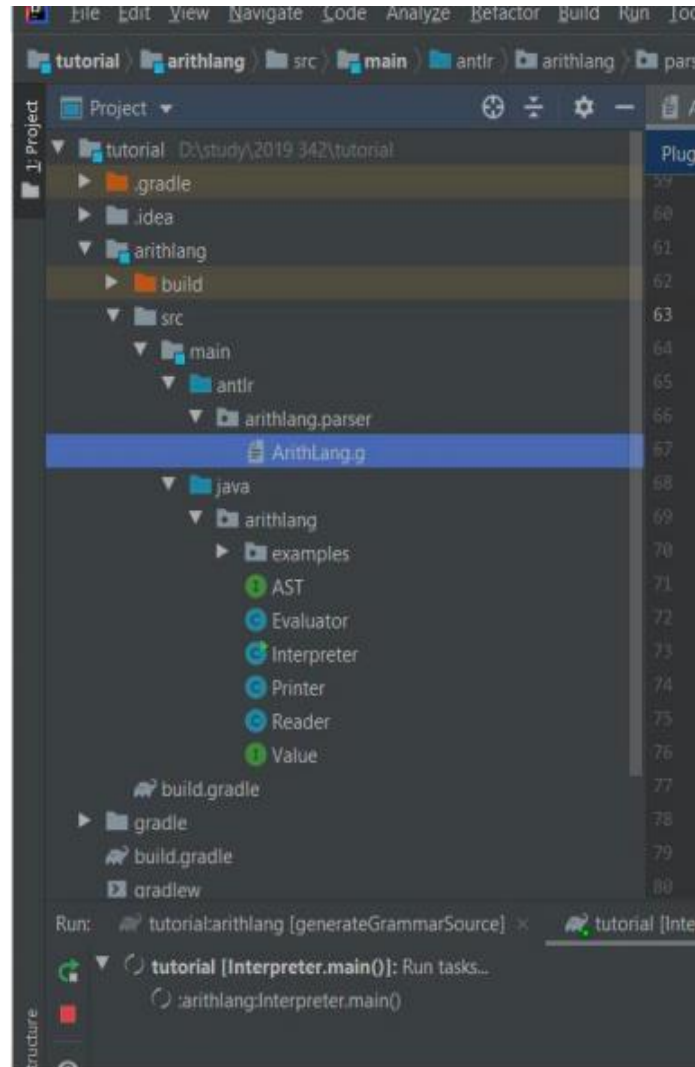
```
> Task :arithlang:generateGrammarSource
> Task :arithlang:compileJava
> Task :arithlang:processResources NO-SOURCE
> Task :arithlang:classes

> Task :arithlang:Interpreter.main()
Type a program to evaluate and press the enter key, e.g. (+ (* 3 100) (/ 84 (- 279 277)))
Press Ctrl + C to exit.
$
```

12. Since the second, you can run the interpreter by clicking the run button. Please make sure you select interpreter on the check box beside the button before running it



13. To modify the current grammar, you can edit the file src -> main -> antlr -> arithlang.parser -> ArithLang



14. Once you modify this file, every time the Interpreter is run, the build system generates java files for the parser automatically.