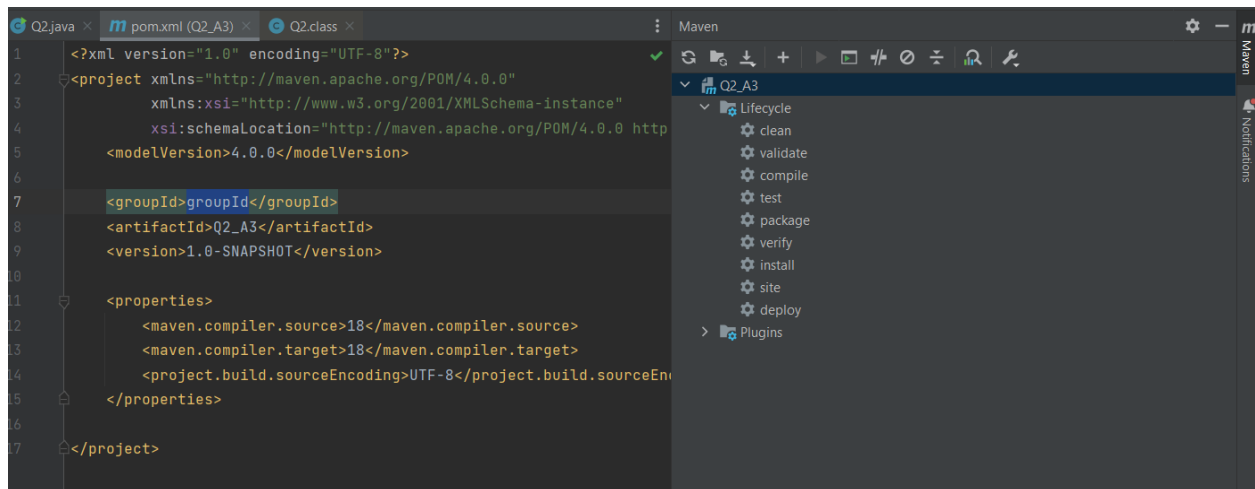


- > open maven project in intellij
- > open pom.xml file
- > click on maven>lifecycle

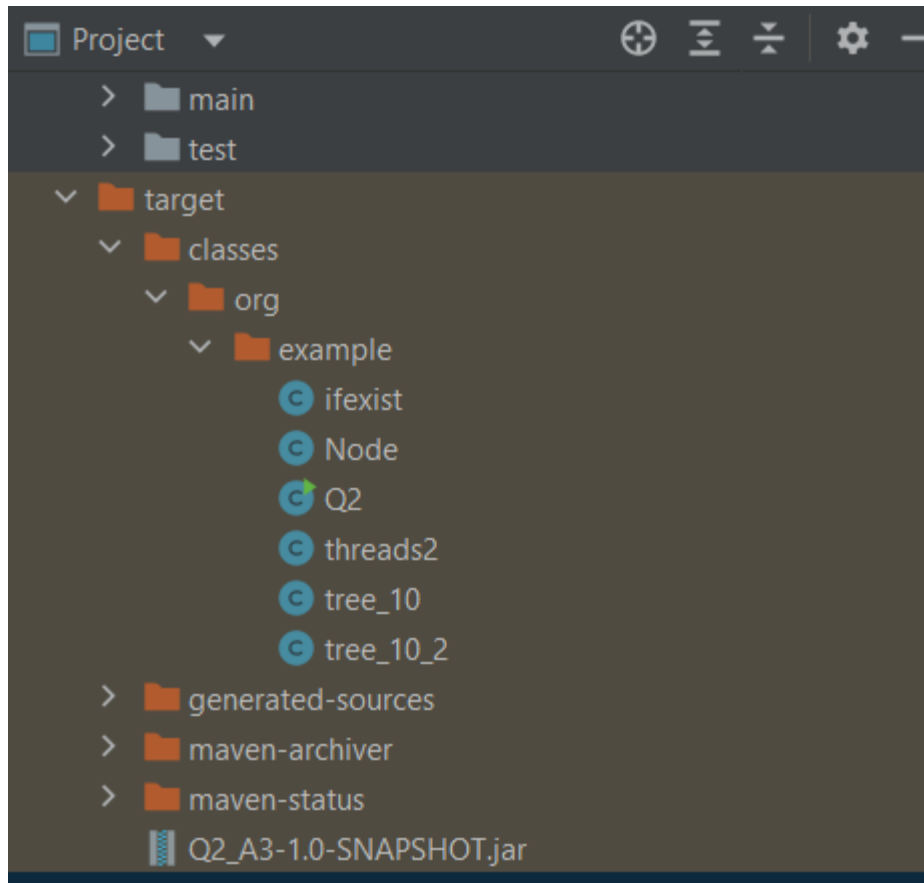


- > double right click on install
- > Result of this should be like

```
[INFO] Installing C:\Users\Ankush\Desktop\ap\Q2_A3\pom.xml to C:\Users\Ankush\.m2\repository\groupId\Q2_A3\1.0-SNAPSHOT
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 2.283 s
[INFO] Finished at: 2022-12-04T23:23:54+05:30
[INFO] -----

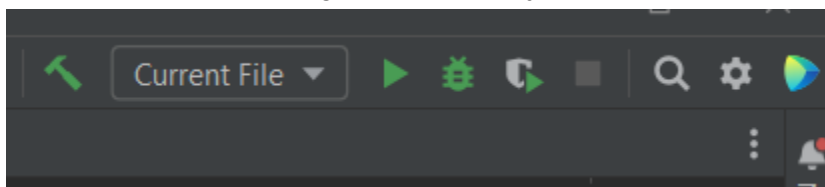
Process finished with exit code 0
```

- > open on Q1.class



P.S. : Pardon screenshot is as per Q2

> click on run option in right side of intellij



> input : Give the length of the array

Results :

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains  
Execution time (not-threading): 600nanoseconds  
Execution time (threading): 542800 nanoseconds.
```

This is the result when array length is 1

The execution time of threaded is more due to overhead.

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
Execution time (not-threading): 14600nanoseconds
Execution time (threading): 436400 nanoseconds.
```

This is the result when array length is 10

The execution time of threaded is more due to overhead.

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Fil
Execution time (not-threading): 653200nanoseconds
Execution time (threading): 637300 nanoseconds.
```

This is the result when array length is 100

The execution time of threaded is less due to the compassion of overhead by parallelisation.

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
Execution time (not-threading): 16 milliseconds
Execution time (threading): 0 milliseconds.
```

This is the result when array length is 1000

The execution time of threaded is less due to the compassion of overhead by parallelisation.

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\
Execution time (not-threading): 272 milliseconds
Execution time (threading): 73 milliseconds.

Process finished with exit code 0
```

This is the result when array length is 1000

The execution time of threaded is less due to the compassion of overhead by parallelisation.