

```
# seg3103_playground
```

```
## Synopsis
```

This repository contain the code, inserts and results for the first lab of the course SEG3503 during the summer term 2021.

```
## Java
```

I am running Java openjdk 14

Instruction to see the java version :

```
$ java --version
```

Output:

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>java --version
java 14.0.2 2020-07-14
Java(TM) SE Runtime Environment (build 14.0.2+12-46)
Java HotSpot(TM) 64-Bit Server VM (build 14.0.2+12-46, mixed mode, sharing)
```

Instruction to compile the code on Newmath_java folder:

```
javac -encoding UTF-8 --source-path src -d dist src/*.java
```

Instruction to execute the code:

```
java -cp ./dist Main
```

Example of Output:

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>javac -encoding UTF-8 --source-path src -d dist src/*.java
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>java -cp ./dist Main
Newmath (type 'exit' to exit program)
Numerator: 10
Demoninator: 2
10 / 2 = 5
Numerator: 4
Demoninator: 2
4 / 2 = 2
Numerator: exit
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>
```

```
## Junit
```

I am working with JUnit 5 (via Console standalone 1.7.1)

To run JUnit, I need to compile the application, and then compile the test code

Instruction to compile the application :

```
javac -encoding UTF-8 --source-path src -d dist -cp lib/junit-platform-console-standalone-1.7.1.jar test/*.java
```

Instruction to run the test :

```
java -jar lib/junit-platform-console-standalone-1.7.1.jar --class-path dist --scan-class-path
```

Output Screenshot :

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>java -jar lib/junit-platform-console-standalone-1.7.1.jar --class-path dist --scan-class-path
```

Thanks for using JUnit! Support its development at <https://junit.org/sponsoring>

```

[36m. [0m
[36m+-- [0m [36mJUnit Jupiter [0m [32m[OK] [0m
[36m| '-- [0m [36mNewmathTest [0m [32m[OK] [0m
[36m|   +-- [0m [34mdiv_ok() [0m [32m[OK] [0m
[36m|   '-- [0m [34mdiv_by_zero() [0m [32m[OK] [0m
[36m|-- [0m [36mJUnit Vintage [0m [32m[OK] [0m
```

```
Test run finished after 93 ms
[      3 containers found      ]
[      0 containers skipped    ]
[      3 containers started    ]
[      0 containers aborted    ]
[      3 containers successful ]
[      0 containers failed     ]
[      2 tests found           ]
[      0 tests skipped         ]
[      2 tests started         ]
[      0 tests aborted         ]
[      2 tests successful      ]
[      0 tests failed          ]
```

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_java>
```

##Elixir

I am running Elixir 11.4 with Erlang 23

Instruction to see the version :

```
$ elixir --version
```

Output Screenshot :

```
C:\Users\kaana>elixir --version
Erlang/OTP 21 [erts-10.3] [64-bit] [smp:8:8] [ds:8:8:10] [async-threads:1]

Elixir 1.11.4 (compiled with Erlang/OTP 21)
```

Instruction to compile the program:

```
mix compile
```

Instruction to execute the program:

```
iex -S mix
```

Output screenshot:

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_ex>mix compile

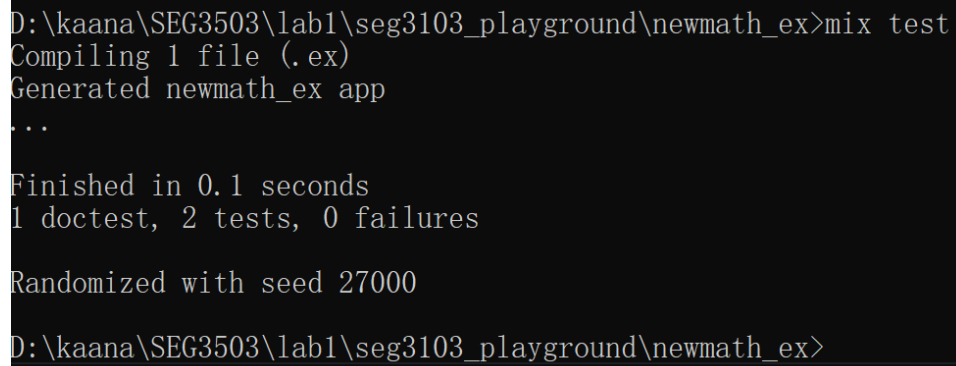
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_ex>iex -S mix
Interactive Elixir (1.11.4) - press Ctrl+C to exit (type h() ENTER for help)
iex(1)> NewmathEx.div(10,2)
{:ok, 5.0}
iex(2)> NewmathEx.div(20,5)
{:ok, 4.0}
iex(3)> NewmathEx.div(4,0)
{:error, "Cannot divide by zero"}
iex(4)>
```

```
## ExUnit
```

Instruction to run the test:

```
mix test
```

Output screenshot:

A screenshot of a terminal window with a black background and white text. The text shows the execution of the 'mix test' command in a directory path. The output includes compilation status, execution time, test results, and a randomized seed.

```
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_ex>mix test
Compiling 1 file (.ex)
Generated newmath_ex app
...
Finished in 0.1 seconds
1 doctest, 2 tests, 0 failures

Randomized with seed 27000
D:\kaana\SEG3503\lab1\seg3103_playground\newmath_ex>
```