#### Instructions:

Should work with just mvn package it does on my machine, all output files are generated inside outputs folder, all expected output files are inside of the expectedOut folder. Project is made using java14

## **Commit History**

This commit was once the first feature tests started working:

https://github.com/ryannav/CSE-464-2023-mrnavar2/commit/779258ec7593dce51b3200bbc624f7cc678050df

This was the commit once the second feature began working:

https://github.com/ryannav/CSE-464-2023-mrnavar2/commit/6f753064da299926ad12a58ae902 1f087d7d8df0

Third feature:

https://github.com/ryannav/CSE-464-2023-mrnavar2/commit/8e97819bc515667121c5a05663c59aaa5a6cc68c

Fourth feature:

https://github.com/ryannav/CSE-464-2023-mrnavar2/commit/fc6b3306ab087045a038aacd017a7079ef5435a1

Final commit that includes test files(didnt mean to push them but it shows the completed tests) this also has all features working with mvn package:

https://github.com/ryannav/CSE-464-2023-mrnavar2/commit/97f6e2fe135d56045bb7f47e5342846d0e47d95c

#### mvn package output:

```
PS E:\Programming\intellijprojects\CSE-464-2023-mrnavar2> mvn package
[INFO] Scanning for projects...
[INFO]
[INFO] ------ asu:CSE-464-2023-mrnavar2 >-----
[INFO] Building CSE-464-2023-mrnavar2 1.0-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- resources:3.3.1:resources (default-resources) @ CSE-464-2023-mrnavar2 ---
[INFO] Copying 0 resource from src\main\resources to target\classes
[INFO]
[INFO] --- compiler:3.8.1:compile (default-compile) @ CSE-464-2023-mrnavar2 ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- resources:3.3.1:testResources (default-testResources) @ CSE-464-2023-mrnavar2 ---
[INFO] skip non existing resourceDirectory E:\Programming\intellijprojects\CSE-464-2023-mrnavar2\src\test\resources
[INFO] --- compiler:3.8.1:testCompile (default-testCompile) @ CSE-464-2023-mrnavar2 ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- surefire:3.1.2:test (default-test) @ CSE-464-2023-mrnavar2 ---
[INFO] Using auto detected provider org.apache.maven.surefire.junit4.JUnit4Provider
[INFO]
[INFO] -----
[INFO] TESTS
[INFO] -----
[INFO] Running myTests
Number of vertexes in your graph: 6
Number of edges in your graph: 6
digraph "A" {
```

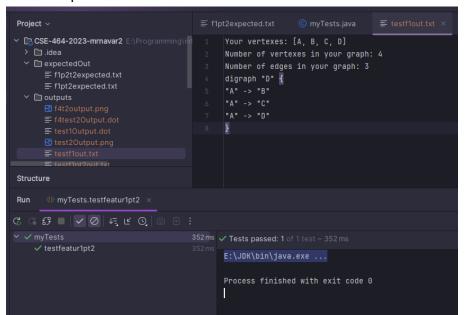
```
"A" -> "B"
"C" -> "D"
"B" -> "C"
"B" -> "F"
Your vertexes: [A, B, C, D, F]
Number of vertexes in your graph: 5
Number of edges in your graph: 5
digraph "A" {
"A" -> "C"
"A" -> "B"
"C" -> "D"
"B" -> "C"
"B" -> "F"
Your vertexes: [A, B, C, D]
Number of vertexes in your graph: 4
Number of edges in your graph: 4
digraph "D" {
"A" -> "B"
"A" -> "C"
"A" -> "D"
"B" -> "C"
Your vertexes: [A, B, C, D]
Number of vertexes in your graph: 4
Number of edges in your graph: 3
[INFO] Results:
[INFO] Tests run: 14, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
[INFO] --- jar:3.3.0:jar (default-jar) @ CSE-464-2023-mrnavar2 ---
[INFO] ------
[INFO] BUILD SUCCESS
[INFO] ------
[INFO] Total time: 3.003 s
[INFO] Finished at: 2023-10-11T01:58:31-07:00
```

#### **OUTPUTS**

I wrote 2 tests for each feature but here I'll show an example of one of each test:

# Feature 1 pt 1:

# Feature 1 pt 2:



# Feature 2 pt 1:

### Feature 2 pt 2:

#### Feature 3:

```
v / myTests
v testfeature3

375 ms

/ Tests passed: 1 of 1 test - 375 ms

/ Tests passed: 1 of 1 test - 375 ms

E:\JDK\bin\java.exe ...

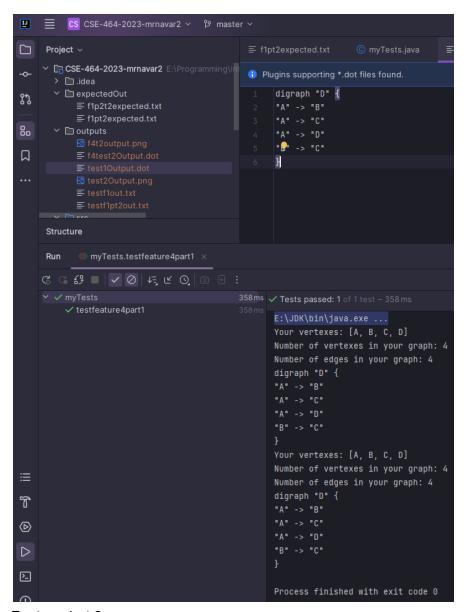
Your vertexes: [A, B, C, D]

Number of vertexes in your graph: 4

digraph "D" {
    "A" -> "B"
    "A" -> "C"
    "A" -> "D"
    "B" -> "C"
}

Process finished with exit code 0
```

Feature 4pt1:



Feature 4 pt 2:

