

Saad S Khan

Professor Mehlhase

January 12st 2023

SER321

Assignment 1

Github Repo: <https://github.com/SSKHAN9/ser321-spring2023-C-SSKHAN9>

System: MacOS 13.1

Part 1: Linux, Setup

Completed.

Part 2: Command Line Tasks

1. `mkdir cli_assignment`

2. `cd cli_assignment`

3. `touch stuff.txt`

4. `cat > stuff.txt`

Hi, My name is Saad.

This is my code for assignment 1.

Have a great day!

5. `wc -w stuff.txt //to get word count`

`wc -l stuff.txt //to get line count`

6. `echo "this is the appended text" >> stuff.txt`

7. mkdir draft

8. mv ~/cli_assignment/stuff.txt ~/cli_assignment/draft/stuff.txt

9. cd draft //changed working directory to draft

touch .secret.txt.

10. cd .. //to go back to cli_assignment

cp -r ~/cli_assignment/draft ~/cli_assignment/final //to create copy of draft.

11. mv ~/cli_assignment/draft ~/cli_assignment/draft.remove

12. mv ~/cli_assignment/draft.remove ~/cli_assignment/final/

13. ls -lR

14. gzip -l NASA_access_log_Aug95.gz

15. gzip -d NASA_access_log_Aug95.gz

16. mv NASA_access_log_Aug95 logs.txt

17. mv logs.txt ~/cli_assignment/

18. head -100 logs.txt

19. head -100 logs.txt >> logs_top_100.txt

20. `tail -100 logs.txt`

21. `tail -100 logs.txt >> logs_bottom_100.txt`

22. `cat logs_top_100.txt logs_bottom_100.txt >> logs_snapshot.txt`

23. `echo "SSKHAN9: This is a great assignment 01/10/23" >> logs_snapshot.txt`

24. `less logs.txt`

25. `cut -d "%" -f 1 marks.csv | tail -n -1000`

26. `cut -d "%" -f 4 marks.csv | tail -n -1000 | sort`

27. `cut -d "%" -f 3 marks.csv | tail -n -1000 | awk -F';' '{sum+=$1} END {print sum/1000}'`

28. `cut -d "%" -f 3 marks.csv | tail -n -1000 | awk -F';' '{sum+=$1} END {print sum/1000}' >>`

`~/cli_assignment/done.txt`

29. `mv done.txt final`

30. `mv done.txt average.txt`

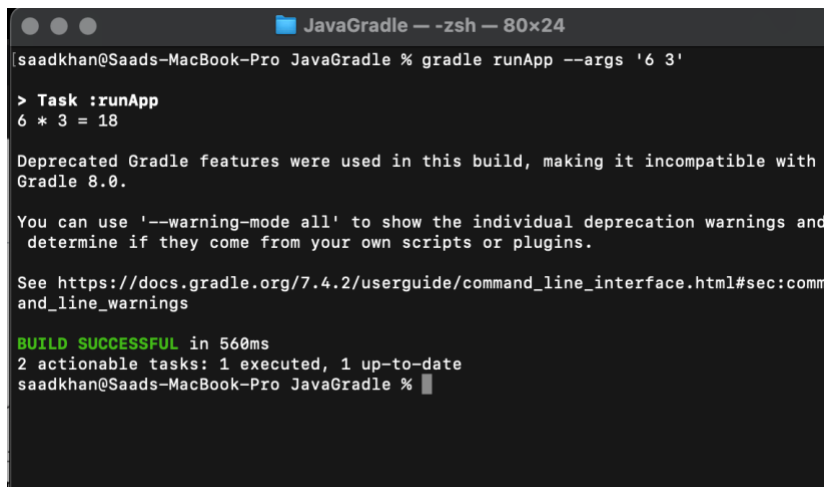
Part 3.1: Setup a GitHub repo to submit your assignments

Completed and link on top of document.

Part 3.2: Running examples

1. Running JavaGradle:

The JavaGradle program build and tests the Multiply and Fraction classes. In the Program are three runnable tests, two for the multiply class and one for the fraction class. The test that I ran is the runApp test which takes two arguments and passes it to the multiply class to be multiplied and displayed. The test was successful.



```
saadkhan@Saads-MacBook-Pro JavaGradle % gradle runApp --args '6 3'

> Task :runApp
6 * 3 = 18

Deprecated Gradle features were used in this build, making it incompatible with
Gradle 8.0.

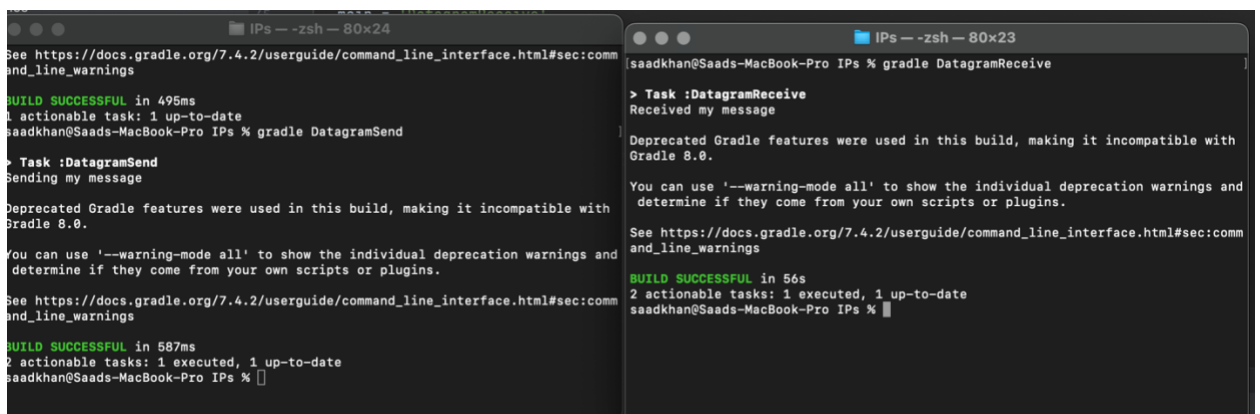
You can use '--warning-mode all' to show the individual deprecation warnings and
determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:comm
and_line_warnings

BUILD SUCCESSFUL in 560ms
2 actionable tasks: 1 executed, 1 up-to-date
saadkhan@Saads-MacBook-Pro JavaGradle %
```

2. Running IPs example:

The IPs gradle build runs the main functions of multiple programs in the IPs directory. I tested DatagramSend and DatagramRecieve tasks to test this example. In this test, the words 'my message' were sent & received by two terminals connected to the port '9099'.



```
saadkhan@Saads-MacBook-Pro IPs % gradle DatagramSend

> Task :DatagramSend
Sending my message

Deprecated Gradle features were used in this build, making it incompatible with
Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and
determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:comm
and_line_warnings

BUILD SUCCESSFUL in 587ms
2 actionable tasks: 1 executed, 1 up-to-date
saadkhan@Saads-MacBook-Pro IPs %

saadkhan@Saads-MacBook-Pro IPs % gradle DatagramReceive

> Task :DatagramReceive
Received my message

Deprecated Gradle features were used in this build, making it incompatible with
Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and
determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:comm
and_line_warnings

BUILD SUCCESSFUL in 56s
2 actionable tasks: 1 executed, 1 up-to-date
saadkhan@Saads-MacBook-Pro IPs %
```

3. Running G-RPC example in middleware files:

In this example I ran the task called runJavaServer. This task started a java server at the port '9099'. In this gradle build, unlike the gradle build in IPs, the port variable was defined and reused in multiple tasks while in IPs the port was defined in the tasks that were using it.

```
Last login: Thu Jan 12 15:06:12 on ttys001
saadkhan@Saads-MacBook-Pro ~ % cd ser321examples-master
saadkhan@Saads-MacBook-Pro ser321examples-master % cd Middleware
saadkhan@Saads-MacBook-Pro Middleware % cd G-RPC
saadkhan@Saads-MacBook-Pro G-RPC % gradle build

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:command_line_warnings

BUILD SUCCESSFUL in 584ms
8 actionable tasks: 8 up-to-date
saadkhan@Saads-MacBook-Pro G-RPC % gradle test

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:command_line_warnings

BUILD SUCCESSFUL in 522ms
7 actionable tasks: 7 up-to-date
saadkhan@Saads-MacBook-Pro G-RPC % gradle runClientJava

> Task :G-RPC:runClientJava
RPC failed: UNAVAILABLE: io exception

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:command_line_warnings

BUILD SUCCESSFUL in 1s
4 actionable tasks: 1 executed, 3 up-to-date
saadkhan@Saads-MacBook-Pro G-RPC % gradle runServerJava

FAILURE: Build failed with an exception.

* What went wrong:
Task 'runServerJava' not found in project ':G-RPC'. Some candidates are: 'runServerJava'.

* Try:
> Run gradle tasks to get a list of available tasks.
> Run with --stacktrace option to get the stack trace.
> Run with --info or --debug option to get more log output.
> Run with --scan to get full insights.

* Get more help at https://help.gradle.org

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.4.2/userguide/command_line_interface.html#sec:command_line_warnings

BUILD FAILED in 580ms
saadkhan@Saads-MacBook-Pro G-RPC % gradle runServerJava

> Task :G-RPC:runServerJava
Server running ...
<===== 87% EXECUTING [3m 9s]
> :G-RPC:runServerJava
```

Part 3.3: Understanding Gradle

Completed and added to GitHub repo.

Part 3.4: Set up your second system

Second System: AWS

Link to Screencast: <https://youtu.be/9ddawgEZGOE>