Darbui atlikti naudojau tą pačią Debian WSL machine, kaip ir jūsų ND4.

Kadangi darbui atlikti naudojau tą pačią Debian WSL machine, tai installinu per APT

Kadangi neturėjau `curl`, teko jį susiinstaliuoti

```
user@DESKTOP-L5PHPUN:~$ curl -o /etc/apt/keyrings/apache-cassandra.asc
https://downloads.apache.org/cassandra/KEYS
-bash: curl: command not found
user@DESKTOP-L5PHPUN:~$ sudo apt install curl
```

Tada į reikiama direktorija susidėjau cassandros keys, kad APT matytu is kur siustis cassandra.

```
user@DESKTOP-L5PHPUN:~$ sudo curl -o /etc/apt/keyrings/apache-cassandra.asc
https://downloads.apache.org/cassandra/KEYS
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  263k  100  263k    0     0   847k      0 --:--:-- --:--:-- --:--:--  849k
user@DESKTOP-L5PHPUN:~$
```

ir

```
sudo apt-get update
sudo apt-get install cassandra
```

Pabandžiau paleisti Cassandra, bet gavau klaidą, kad Java versija per sena, nuo praėjusio ND4 naudojau JRE17 ir problemų nemačiau, tačiau Cassandra expectina bent jau JAVA11 arba mažesnę versiją.

```
user@DESKTOP-L5PHPUN:~$ nodetool status
nodetool: Failed to connect to '127.0.0.1:7199' - ConnectException: 'Connection
refused'.
```

```
user@DESKTOP-L5PHPUN:~$ tail -f logs/system.log
tail: cannot open 'logs/system.log' for reading: No such file or directory
tail: no files remaining
user@DESKTOP-L5PHPUN:~$ ps aux | grep cassandra
user        951  0.0  0.0  14372  1180 tty1     S    19:18   0:00 grep cassandra
user@DESKTOP-L5PHPUN:~$ sudo systemctl status cassandra
System has not been booted with systemd as init system (PID 1). Can't operate.
Failed to connect to bus: Host is down
user@DESKTOP-L5PHPUN:~$ cassandra -f
OpenJDK 64-Bit Server VM warning: Option UseBiasedLocking was deprecated in
version 15.0 and will likely be removed in a future release.
Unrecognized VM option 'UseConcMarkSweepGC'
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.
user@DESKTOP-L5PHPUN:~$
```

Kelias iki senesnės javos instaliacijos

Kadangi naudoju extra minimal WSL Debian instaliaciją, tai nėra jokių papildomų repozitorijų, todėl teko JAVA11 parsisiųsti rankiniu būdu.

```
wget https://github.com/adoptium/temurin11-binaries/releases/download/jdk-
11.0.27+6/OpenJDK11U-jdk_x64_linux_hotspot_11.0.27_6.tar.gz
tar -xvzf OpenJDK11U-jdk_x64_linux_hotspot_11.0.27_6.tar.gz
```

Susitvarkiau `.bashrc`, pridėdamas naujus JAVA export'us

Nano:

```
export JAVA_HOME=$HOME/jdk-11.0.27+6
export PATH=$JAVA_HOME/bin:$PATH
```

```
user@DESKTOP-L5PHPUN:~$ nano ~/.bashrc
user@DESKTOP-L5PHPUN:~$ source ~/.bashrc
user@DESKTOP-L5PHPUN:~$ java --version
openjdk 11.0.27 2025-04-15
OpenJDK Runtime Environment Temurin-11.0.27+6 (build 11.0.27+6)
OpenJDK 64-Bit Server VM Temurin-11.0.27+6 (build 11.0.27+6, mixed mode)
user@DESKTOP-L5PHPUN:~$
```

Pabandžius paleisti Cassandra, vis dar gavau papildomų klaidų

Pagrinde jos reiškia, kad nėra suteikta papildomų teisių, tad tai susitvarkiau

```
user@DESKTOP-L5PHPUN:~$ cassandra -f
OpenJDK 64-Bit Server VM warning: Option UseConcMarkSweepGC was deprecated in
version 9.0 and will likely be removed in a future release.
[0.003s][error][logging] Error opening log file '/var/log/cassandra/gc.log':
Permission denied
[0.003s][error][logging] Initialization of output 'file=/var/log/cassandra/gc.log'
using options 'filecount=10,filesize=10485760' failed.
Invalid -Xlog option '-
Xlog:gc=info,heap*=trace,age*=debug,safepoint=info,promotion*=trace:file=/var/log/
cassandra/gc.log:time,uptime,pid,tid,level:filecount=10,filesize=10485760', see
error log for details.
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.
```

Pasileidau

```
sudo mkdir -p /var/log/cassandra
sudo chown -R $(whoami):$(whoami) /var/log/cassandra
```

Bandant paleisti Cassandra, vel errors, pagrinde, nes nera log dir'o:

```
Exception (java.lang.ExceptionInInitializerError) encountered during startup: null
java.lang.ExceptionInInitializerError
        at
org.apache.cassandra.service.CassandraDaemon.setup(CassandraDaemon.java:251)
        at
org.apache.cassandra.service.CassandraDaemon.activate(CassandraDaemon.java:744)
        at
org.apache.cassandra.service.CassandraDaemon.main(CassandraDaemon.java:878)
Caused by: java.lang.IllegalStateException: /var/lib/cassandra/data; unable to
start server
        at
org.apache.cassandra.config.DatabaseDescriptor.createAllDirectories(DatabaseDescri
ptor.java:1624)
        at org.apache.cassandra.db.commitlog.CommitLog.<init>(CommitLog.java:108)
        at
org.apache.cassandra.db.commitlog.CommitLog.construct(CommitLog.java:92)
        at org.apache.cassandra.db.commitlog.CommitLog.<clinit>(CommitLog.java:77)
        ... 3 more
INFO  [ScheduledTasks:1] 2025-04-27 20:29:06,827 StreamManager.java:260 - Storing
streaming state for 3d or for 119156 elements
ERROR [main] 2025-04-27 20:29:06,827 CassandraDaemon.java:900 - Exception
encountered during startup
java.lang.ExceptionInInitializerError: null
```

```
        at
org.apache.cassandra.service.CassandraDaemon.setup(CassandraDaemon.java:251)
        at
org.apache.cassandra.service.CassandraDaemon.activate(CassandraDaemon.java:744)
        at
org.apache.cassandra.service.CassandraDaemon.main(CassandraDaemon.java:878)
Caused by: java.lang.IllegalStateException: /var/lib/cassandra/data; unable to
start server
        at
org.apache.cassandra.config.DatabaseDescriptor.createAllDirectories(DatabaseDescri
ptor.java:1624)
        at org.apache.cassandra.db.commitlog.CommitLog.<init>(CommitLog.java:108)
        at
org.apache.cassandra.db.commitlog.CommitLog.construct(CommitLog.java:92)
        at org.apache.cassandra.db.commitlog.CommitLog.<clinit>(CommitLog.java:77)
        ... 3 common frames omitted
```

Pasileidau:

```
sudo mkdir -p /var/log/cassandra
sudo chown -R $(whoami):$(whoami) /var/log/cassandra
```

Ir paleidau Cassandra iš naujo, šįkart viskas veikia. Logų tikrai nepateiksiu,
nes bus per daug.

Ant kito terminalo instance pasileidau:

```
user@DESKTOP-L5PHPUN:~$ nodetool status
Datacenter: datacenter1
=======================
Status=Up/Down
|/ State=Normal/Leaving/Joining/Moving
--  Address     Load        Tokens  Owns (effective)  Host ID
Rack
UN  127.0.0.1   104.38 KiB  16      100.0%            4f83281b-0332-40d3-9065-
28c5f06e9263   rack1

user@DESKTOP-L5PHPUN:~$ cqlsh
Connected to Test Cluster at 127.0.0.1:9042
[cqlsh 6.1.0 | Cassandra 4.1.8 | CQL spec 3.4.6 | Native protocol v5]
Use HELP for help.
cqlsh> SELECT release_version FROM system.local;

 release_version
-----------------
          4.1.8
```

```
(1 rows)
cqlsh>
```