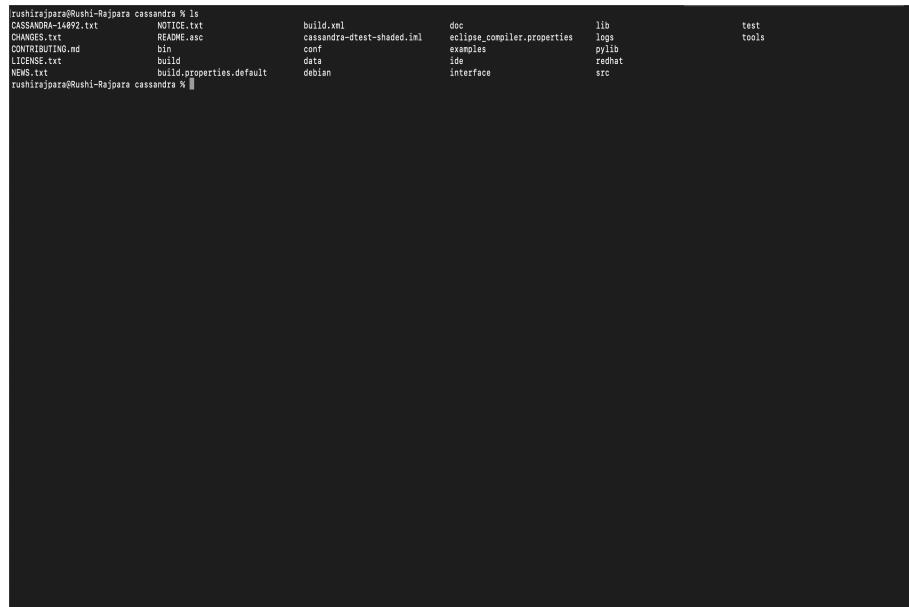

Cassandra Installation Guide for MAC

1. Open terminal and run the following command:

```
git clone https://github.com/Rushi11111/Cassandra.git
```

2. Now navigate to *Cassandra* directory. To check that you are in the required directory run command *ls* and result should be similar to the image given below



```
rushirajpara@Rushi-MacBook-Pro:~/cassandra % ls
CONTRIBUTING.md      build.xml      doc          eclipse_compiler.properties  lib          test
CHANGES.txt          README.asc      examples     eclipse_compiler.shaded.iml  logs          tools
LICENSE.txt          bin           conf        ide          interface             pylib
NEWS.txt            build         data        redhat      src
rushirajpara@Rushi-MacBook-Pro:~/cassandra %
```

3. Now run *brew install ant*.

NOTE for running this command homebrew should be installed. If it is not installed then follow steps given on the following link.

<https://brew.sh/>

```
rushirajpara@Rushi-rajpara:~/cassandra % ls
CASSANDRA-14992.txt      NOTICE.txt      build.xml      doc      eclipse_compiler.properties      lib      test
CHANGES.txt                README.asc      cassandra-dtest-shaded.iml    examples      log      tools
CONTRIBUTING.md            bin          conf          ide      pylib
LICENSE.txt                build          data          interface      redhat
NEWS.txt                  build.properties.default      debian
rushirajpara@Rushi-rajpara:~/cassandra % brew install ant
Updating Homebrew...
=> Auto-updated Homebrew!
Updated 2 taps (homebrew/core and homebrew/cask).
=> Updated Formulae
Updated 18 formulae.
=> New Casks
wzterm
=> Updated Casks
Updated 89 casks.

=> Downloading https://ghcr.io/v2/homebrew/core/ant/manifests/1.10.11
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/d0988c13b2a4dc5843a6f6e6cc58ad7c296dfdf8557d149671b328c45cd778cec---ant-1.10.11.bottle_manifest.json
=> Downloading https://ghcr.io/v2/homebrew/core/ant/blobs/sha256:46a14d89d289b9f1442199a73c18fb8c3f2d6a1ed9c68fb17cfc3abe161b89
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/4c9d9e6df0e5obe1c98ad68968f895bfcfc8140767e1ef4d08eeea9985e197d---ant-1.10.11.all.bottle.tar.gz
Extracting ant-1.10.11.all.tar.gz... /usr/local/Cellar/ant/1.10.11: 1,678 files, 41.9MB
rushirajpara@Rushi-rajpara:~/cassandra %
```

- Now download adopt openjdk from the below link and install it.

<https://adoptopenjdk.net/?variant=openjdk8&jvmVariant=openj9>

- Now open the terminal and run the following command:

`export JAVA_HOME= type path/contents/Home.`

NOTE: Here in place of `type path` you need to enter the path where you have installed openjdk as shown in figure.

```
rushirajpara@Rushi-rajpara:~/cassandra % ls
CASSANDRA-14992.txt      NOTICE.txt      build.xml      doc      eclipse_compiler.properties      lib      test
CHANGES.txt                README.asc      cassandra-dtest-shaded.iml    examples      log      tools
CONTRIBUTING.md            bin          conf          ide      pylib
LICENSE.txt                build          data          interface      redhat
NEWS.txt                  build.properties.default      debian
rushirajpara@Rushi-rajpara:~/cassandra % brew install ant
Updating Homebrew...
=> Auto-updated Homebrew!
Updated 2 taps (homebrew/core and homebrew/cask).
=> Updated Formulae
Updated 18 formulae.
=> New Casks
wzterm
=> Updated Casks
Updated 89 casks.

=> Downloading https://ghcr.io/v2/homebrew/core/ant/manifests/1.10.11
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/d0988c13b2a4dc5843a6f6e6cc58ad7c296dfdf8557d149671b328c45cd778cec---ant-1.10.11.bottle_manifest.json
=> Downloading https://ghcr.io/v2/homebrew/core/ant/blobs/sha256:46a14d89d289b9f1442199a73c18fb8c3f2d6a1ed9c68fb17cfc3abe161b89
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/4c9d9e6df0e5obe1c98ad68968f895bfcfc8140767e1ef4d08eeea9985e197d---ant-1.10.11.all.bottle.tar.gz
Extracting ant-1.10.11.all.tar.gz... /usr/local/Cellar/ant/1.10.11: 1,678 files, 41.9MB
rushirajpara@Rushi-rajpara:~/cassandra % export JAVA_HOME=/Library/Java/JavaVirtualMachines/adoptopenjdk-8.jdk/contents/Home
rushirajpara@Rushi-rajpara:~/cassandra %
```

- Now run the command `ant` from the Cassandra directory as shown in the figure. **NOTE:** This will take few minutes to build for first time.

```

rushirajpara@Rushi-Rajpara:~/cassandra % ls
CASSANDRA-14992.txt      build.xml      doc      lib      test
CASSANDRA-14992.txt      README.jac      cassandra-dtest-shaded.iml  eclipse_compiler.properties  logs
CONTRIBUTING.md          bin           conf      examples  pylib
LICENSE.txt               build         data       ide      redhat
NEWS.txt                 build.properties.default  debian      interface  src
rushirajpara@Rushi-Rajpara:~/cassandra % brew install ant
Updating Homebrew...
  Already up-to-date.
Updated 2 taps (homebrew/core and homebrew/cask).
=> Updated Formulae
Updated 18 formulae.
=> New Casks
westerm
=> Updated Casks
Updated 89 casks.

=> Downloading https://ghcr.io/v2/homebrew/core/ant/manifests/1.10.11
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/d0980c13b2a4c5843a6f66cc58ad7c296df8857d149671b328c45ccf78cec---ant-1.10.11.bottle_manifest.json
=> Downloading https://ghcr.io/v2/homebrew/core/antlr/blobs/sha256:46a14699bf1442199773c18f88c3f2d6a1ed9c68fb17c-f3baeb161b89
Already downloaded: /Users/rushirajpara/Library/Caches/Homebrew/downloads/49cd9ef5df0b50be1c98ad68988769bfcfc0145767e1ef4d08eeea9985d197d---antlr-1.10.11.all.bottle.tgz
Extracting antlr-1.10.11.all.bottle.tgz
D /usr/local/Cellar/antlr/1.10.11: 1,479 files, 41.9MB
rushirajpara@Rushi-Rajpara:~/cassandra % export JAVA_HOME=/Library/Java/JavaVirtualMachines/adoptopenjdk-8.jdk/contents/Home
rushirajpara@Rushi-Rajpara:~/cassandra % ant
Buildfile: /Users/rushirajpara/Documents/cassandra/build.xml

init:
maven-ant-tasks-localrepo:
maven-ant-tasks-download:
maven-ant-tasks-init:
maven-declare-dependencies:
maven-ant-tasks-retrieve-build:
init-dependencies:
  [echo] Loading dependency paths from file: /Users/rushirajpara/Documents/cassandra/build/build-dependencies.xml
init-dependencies:
  [echo] Loading dependency paths from file: /Users/rushirajpara/Documents/cassandra/build/build-dependencies-sources.xml
  [unzip] Expanding: /Users/rushirajpara/Documents/cassandra/build/lib/jars/org.jacoco.agent-0.7.5.281588241946.jar into /Users/rushirajpara/Documents/cassandra/build/lib/jars
check-gen-cql3-grammar:
gen-cql3-grammar:
generate-cql-html:
generate-cql-xml:

```

7. On successful built you will see output similar to the image given below.

```

[echo] Loading dependency paths from file: /Users/rushirajpara/Documents/cassandra/build/build-dependencies-sources.xml
[unzip] Expanding: /Users/rushirajpara/Documents/cassandra/build/lib/jars/org.jacoco.agent-0.7.5.281588241946.jar into /Users/rushirajpara/Documents/cassandra/build/lib/jars
check-gen-cql3-grammar:
gen-cql3-grammar:
generate-cql-html:
generate-cql-xml:
_generate-jflex-java:
_rat_init:
_build_ratinclude:
  [copy] Copying 1 file to /Users/rushirajpara/Documents/cassandra/build
rat-check:
build-project:
  [echo] apache-cassandra: /Users/rushirajpara/Documents/cassandra/build.xml
createVersionPropFile:
[propertyfile] Updating property file: /Users/rushirajpara/Documents/cassandra/src/resources/org/apache/cassandra/config/version.properties
  [copy] Copying 1 file to /Users/rushirajpara/Documents/cassandra/build/classes/msn
build:
build-test:
stress-build:
write-poms:
init:
maven-ant-tasks-localrepo:
maven-ant-tasks-download:
maven-ant-tasks-init:
maven-declare-dependencies:
_write-poms:
jar:
  [jar] Building jar: /Users/rushirajpara/Documents/cassandra/build/apache-cassandra-3.11.11-SNAPSHOT.jar
BUILD SUCCESSFUL
Total time: 6 seconds
rushirajpara@Rushi-Rajpara:~/cassandra %

```

8. Now run command *cassandra -f* as shown below.

9. On successful startup of the Cassandra server you will see output as shown below.

10. To open cassandra shell, open a new terminal and navigate to *bin* directory in Cassandra directory and run command *cqlsh*. **NOTE: For successful startup of shell your python version should be set to 2.7.x**
 11. After successful installation every time when you want to start Cassandra server you need to follow step 5,8,9 and 10 inside *Cassandra* directory.