Cassandra Installation Guide

- First install Java SE Run-time Environment **jre-8u251** from the below link and select installer package according to your operating system https://www.oracle.com/java/technologies/javase/javase8u211-later-archive-downloads.html
- After clicking above link you need to scroll down to Java SE Run-time Environment 8u251 which will look like below.

Java SE Runtime Environment 8u251

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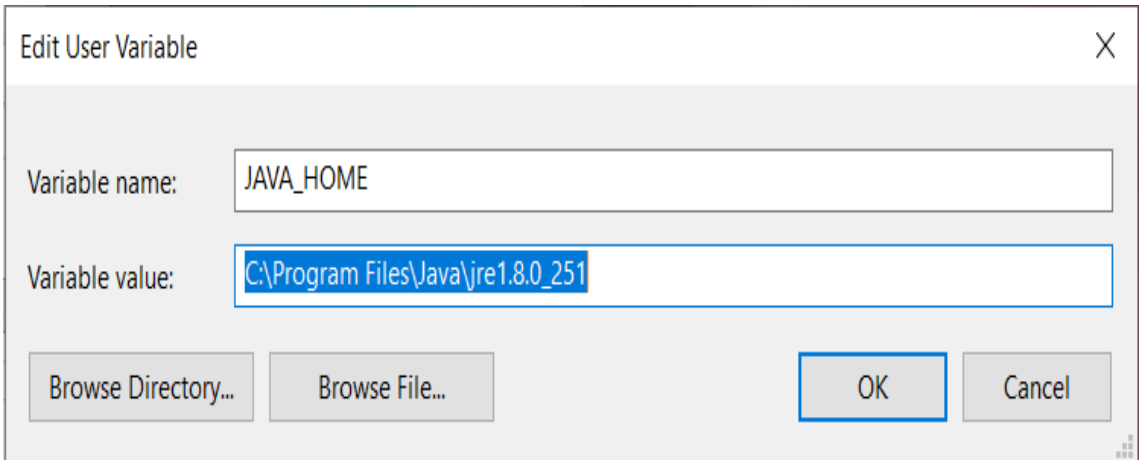
Product / File Description	File Size	Download
Linux x86 RPM Package	68.41 MB	jre-8u251-linux-i586.rpm
Linux x86 Compressed Archive	84.22 MB	jre-8u251-linux-i586.tar.gz
Linux x64 RPM Package	67.6 MB	jre-8u251-linux-x64.rpm
Linux x64 Compressed Archive	83.49 MB	jre-8u251-linux-x64.tar.gz
macOS x64 Installer	80.66 MB	jre-8u251-macosx-x64.dmg
macOS x64 Compressed Archive	72.24 MB	jre-8u251-macosx-x64.tar.gz
Solaris SPARC 64-bit	46.28 MB	jre-8u251-solaris-sparcv9.tar.gz
Solaris x64 Compressed Archive	50.06 MB	jre-8u251-solaris-x64.tar.gz
Windows x86 Online	1.97 MB	jre-8u251-windows-i586-iftw.exe
Windows x86 Offline	65.52 MB	jre-8u251-windows-i586.exe
Windows x86	67.99 MB	jre-8u251-windows-i586.tar.gz
Windows x64	73.73 MB	jre-8u251-windows-x64.exe
Windows x64	73.12 MB	jre-8u251-windows-x64.tar.gz

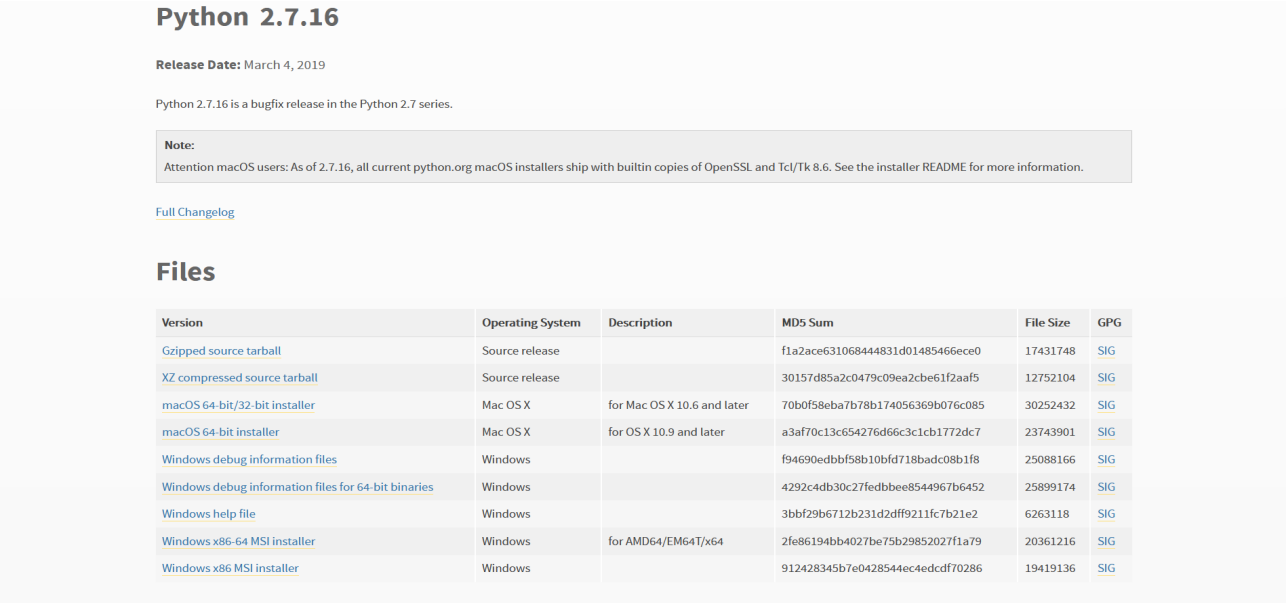
- To download from drive https://drive.google.com/drive/folders/1g2PdER0xLl0rFCAEFTJ8VSOaSACiH647?usp=sharing
- Press windows key and type *edit environment variables* than select first option and click on *New*

- Now create environment variable, where *variable name* = JAVA_HOME and *variable value* = path where you have installed Java SE Run-time Environment 8u251

- The path shown in figure is the default path of installation



- Now install python version 2.7.16 using the below given link. NOTE: Strictly use any 2.7.x version
https://www.python.org/downloads/release/python-2716/



Python 2.7.16

Release Date: March 4, 2019

Python 2.7.16 is a bugfix release in the Python 2.7 series.

Note:
Attention macOS users: As of 2.7.16, all current python.org macOS installers ship with builtin copies of OpenSSL and Tcl/Tk 8.6. See the installer README for more information.

Full Changelog

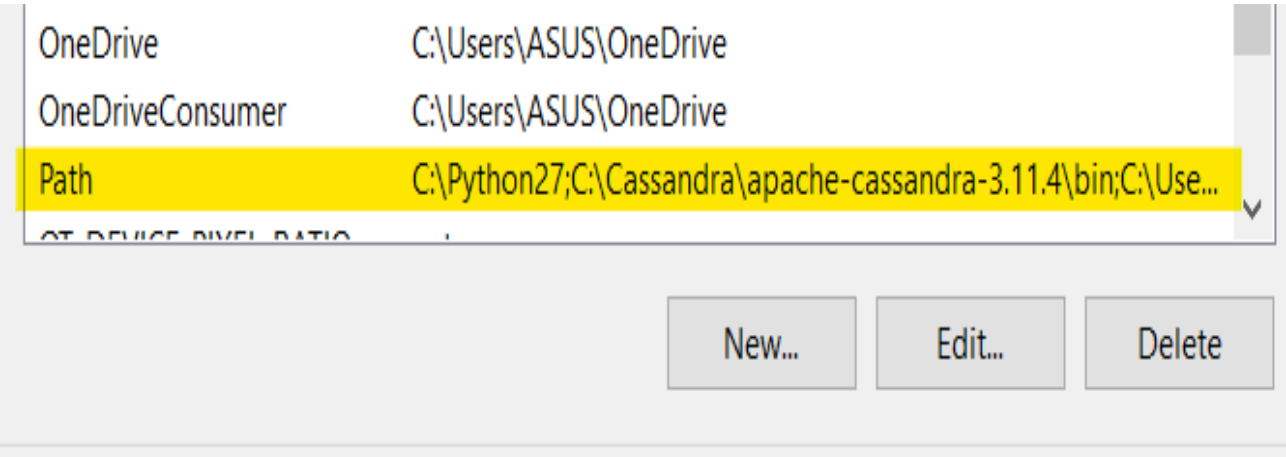
Files

Version	Operating System	Description	MD5 Sum	File Size	GPG
Gzipped source tarball	Source release		f1a2ace631068444831d01485466ece0	17431748	SIG
XZ compressed source tarball	Source release		30157d85a2c0479c09ea2cbe61f2aaf5	12752104	SIG
macOS 64-bit/32-bit installer	Mac OS X	for Mac OS X 10.6 and later	70b0f58eba7b78b174056369b076c085	30252432	SIG
macOS 64-bit installer	Mac OS X	for OS X 10.9 and later	a3af70c13c654276d66c3c1cb1772dc7	23743901	SIG
Windows debug information files	Windows		f94690edbbf58b10bfd718badc08b1f8	25088166	SIG
Windows debug information files for 64-bit binaries	Windows		4292c4db30c27fedbbee8544967b6452	25899174	SIG
Windows help file	Windows		3bbf29b6712b231d2dff9211fc7b21e2	6263118	SIG
Windows x86-64 MSI installer	Windows	for AMD64/EM64T/x64	2fe86194bb4027be75b29852027f1a79	20361216	SIG
Windows x86 MSI installer	Windows		912428345b7e0428544ec4edcdf70286	19419136	SIG

- Download installer for your operating system and install python version 2.7.16

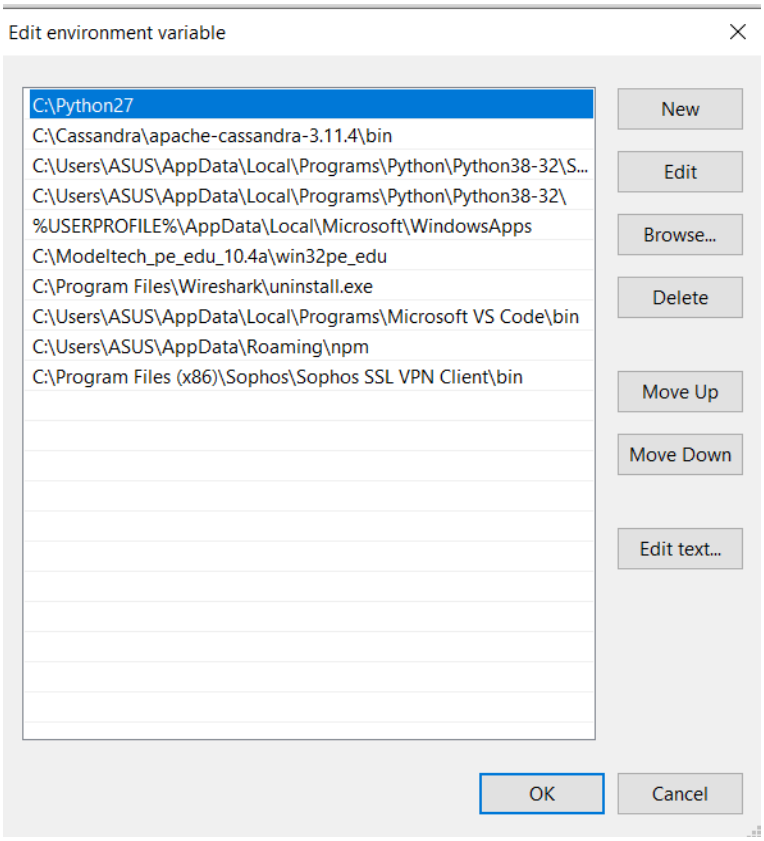
- Now again open *edit environment variables*.

- Select Path from *User Variables* as shown in figure and click on *Edit...*



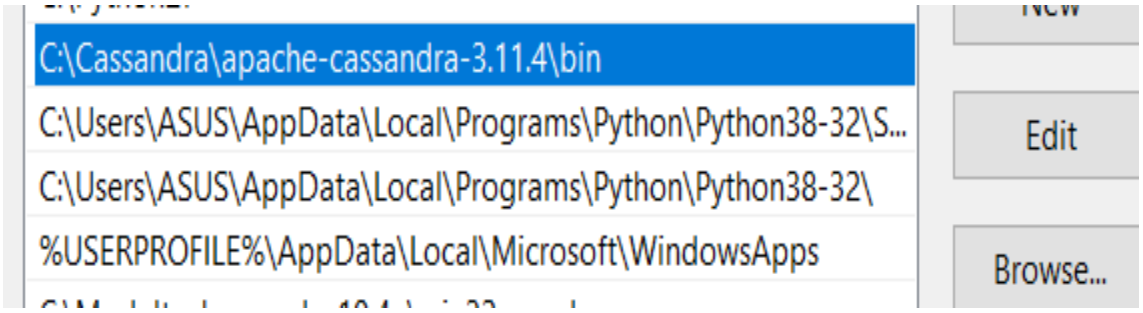
- Now click on *New* and paste the path of python27 folder

- Also after creating the path variable you need to move that at the top of the list using *Move up* button and then click **OK**. Note: if you have some other version of python and you want to reset your python version back then simply move that path to the bottom of list using *Move down* button.

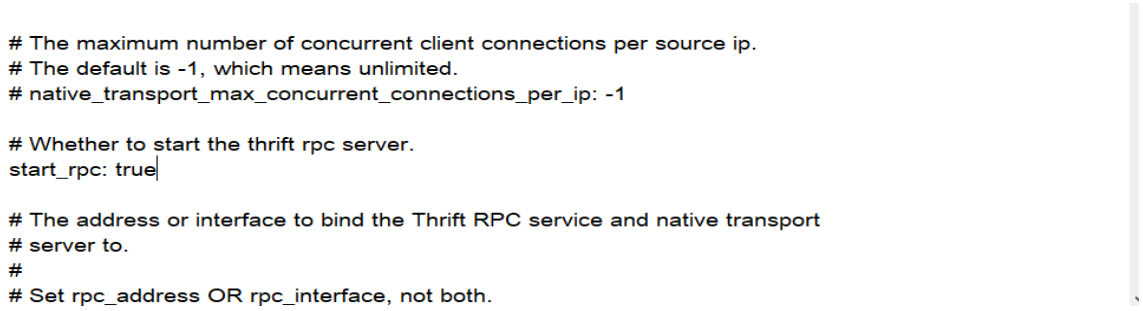


- Now check the python version in command prompt it should look as shown in figure

- Now download the latest stable version of Cassandra.
  https://cassandra.apache.org/download/
- Now extract the tar file to your desired location and copy it's path till bin folder and add it to *Path* variable like python as shown in above figure



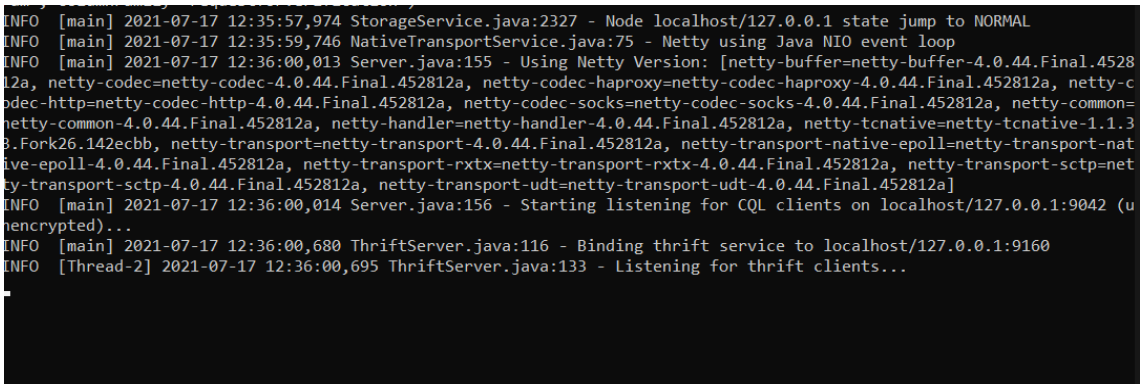
- Now navigate to *conf* directory in the Cassandra directory and open *cassandra.yaml* file in notepad and find ***start_rpc*** which will be false initially, make it ***true*** and also search for ***enable_user_defined_functions*** and ***enable_scripted_user_defined_functions*** and set them both to true and save file as shown in figure.



```
# If unset, all GC Pauses greater than gc_log_threshold_in_ms will log at
# INFO level
# UDFs (user defined functions) are disabled by default.
# As of Cassandra 3.0 there is a sandbox in place that should prevent execution of evil code.
enable_user_defined_functions: true

# Enables scripted UDFs (JavaScript UDFs).
# Java UDFs are always enabled, if enable_user_defined_functions is true.
# Enable this option to be able to use UDFs with "language javascript" or any custom JSR-223 provider.
# This option has no effect, if enable_user_defined_functions is false.
enable_scripted_user_defined_functions: true
```

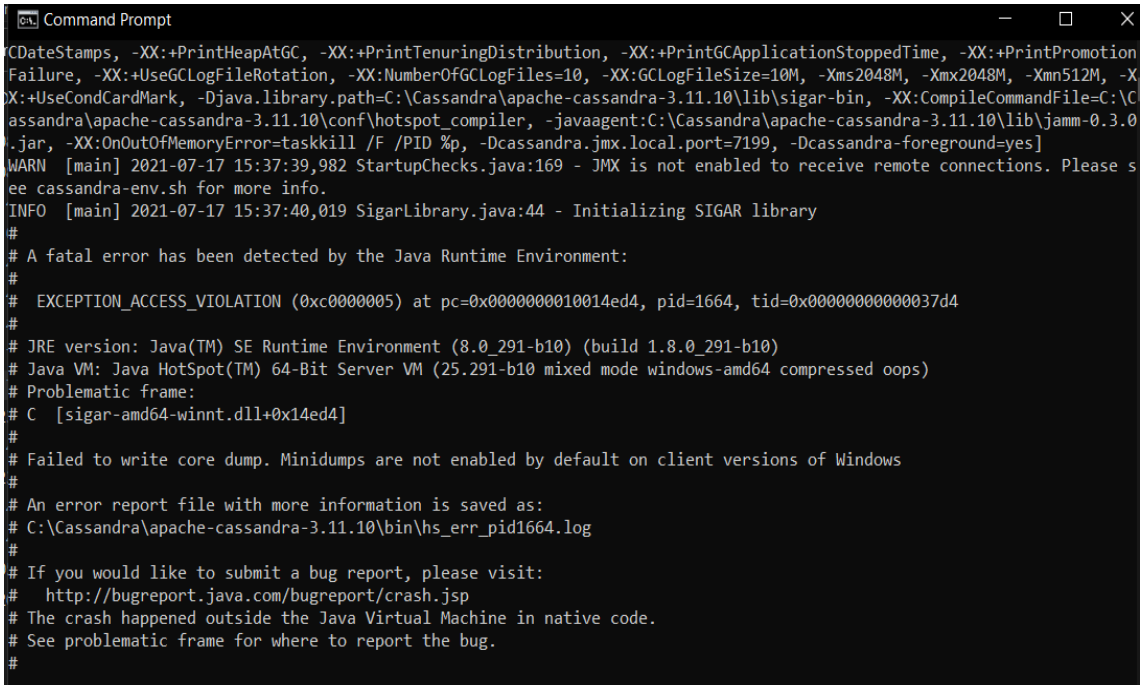
- Now open new command prompt/terminal and type *cassandra*. On successful start up it will look as shown below.



- **NOTE: DO NOT CLOSE ABOVE WINDOW IT WILL RESULT INTO SHUTDOWN OF SERVER**
- Now download pyreadline: https://github.com/pyreadline/pyreadline
- Now click on Green *code* button and then click on *Download Zip*
- Now extract the zip file to your desired location. Now open a new command prompt/terminal window and navigate to *pyreadline-master* and run this command
  python setup.py install
- Now close this command prompt/terminal and open fresh command prompt/terminal and run *cqlsh*

- On successful startup it should look as shown in figure

- Video Link for Installation: https://youtu.be/GNDGWdSZddw
- NOTE: If you don't install version's of applications or if you don't edit *cassandra.yaml* as mentioned in guide than you might face errors as shown below



```
INFO  [main] 2021-07-17 15:48:15,340 Server.java:158 - Using Netty Version: [netty-buffer=netty-buffer-4.0.44.Final.4528
12a, netty-codec=netty-codec-4.0.44.Final.452812a, netty-codec-haproxy=netty-codec-haproxy-4.0.44.Final.452812a, netty-c
odec-http=netty-codec-http-4.0.44.Final.452812a, netty-codec-socks=netty-codec-socks-4.0.44.Final.452812a, netty-common=
netty-common-4.0.44.Final.452812a, netty-handler=netty-handler-4.0.44.Final.452812a, netty-tcnative=netty-tcnative-1.1.3
3.Fork26.142ecbb, netty-transport=netty-transport-4.0.44.Final.452812a, netty-transport-native-epoll=netty-transport-nat
ive-epoll-4.0.44.Final.452812a, netty-transport-rxtx=netty-transport-rxtx-4.0.44.Final.452812a, netty-transport-sctp=net
ty-transport-sctp-4.0.44.Final.452812a, netty-transport-udt=netty-transport-udt-4.0.44.Final.452812a]
INFO  [main] 2021-07-17 15:48:15,341 Server.java:159 - Starting listening for CQL clients on localhost/127.0.0.1:9042 (u
nencrypted)...
INFO  [main] 2021-07-17 15:48:15,543 CassandraDaemon.java:564 - Not starting RPC server as requested. Use JMX (StorageSe
rvice->startRPCServer()) or nodetool (enablethrift) to start it
INFO  [main] 2021-07-17 15:48:15,544 CassandraDaemon.java:650 - Startup complete
INFO  [OptionalTasks:1] 2021-07-17 15:48:24,584 CassandraRoleManager.java:372 - Created default superuser role 'cassandr
a'
```

```
C:\Users\Admin>cqlsh
  File "C:\Cassandra\apache-cassandra-3.11.10\bin\\cqlsh.py", line 146
    except ImportError, e:
                      ^
SyntaxError: invalid syntax
C:\Users\Admin>
```