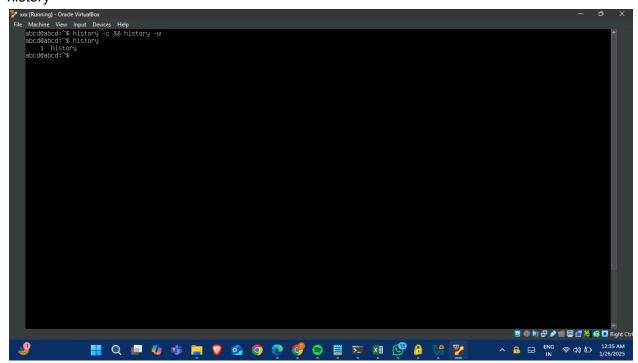
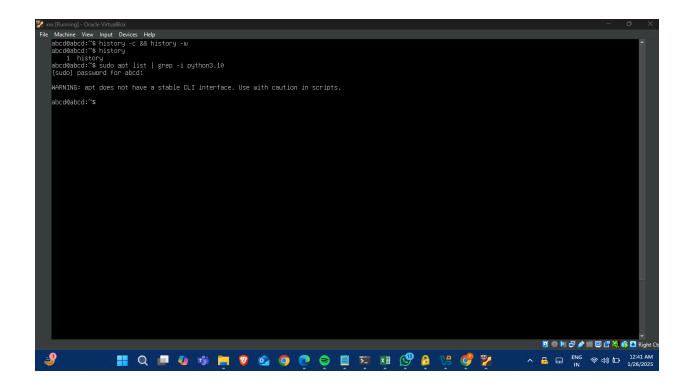
# Removing the history history -c && history -w history



# Removing python3.10

sudo apt list | grep -i python3.10



# Downloading Python 3.10 from tarball

wget https://www.python.org/ftp/python/3.10.0/Python-3.10.0.tgz

tar -xvzf Python-3.10.0.tgz

# Configuring the installed tar file

/configure --enable-optimizations

# Making another folder for python3.10

mkdir -p \$HOME/python3.10

```
abcd@abcd:~/Python-3.10.0$ mkdir -p $HOME/python3.10_
```

# Now configuring this new python3.10 folder

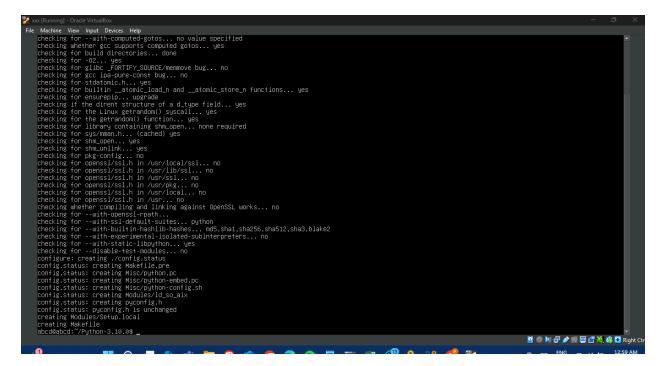
/configure --prefix=\$HOME/python3.10 --enable-optimizations

```
abcd@abcd:~/Python-3.10.0$ ./configure --prefix=$HOME/python3.10 --enable-optimizations_
```

# Using make to build Python

make-j\$(nproc)

make install



# abcd@abcd:~/Python-3.10.0\$ make -j\$(nproc)



In this we understand that we need to build openss! module as it has failed to do so

# Exporting Python to PATH

export PATH=\$HOME/python3.10/bin:\$PATH

echo 'export PATH=\$HOME/python3.10/bin:\$PATH' >> ~/.bashrc

```
abcd@abcd:~/Python-3.10.0$ export PATH=$HOME/python3.10/bin:$PATH_
```

~/. bashrc makes the export permanent

Now Python 3.10 is installed

```
abcd@abcd:~/Python-3.10.0$ export PATH=$HOME/python3.10/bin:$PATH
abcd@abcd:~/Python-3.10.0$ echo 'export PATH=$HOME/python3.10/bin:$PATH' >>~/.bashrc
abcd@abcd:~/Python-3.10.0$ python3.10 --version
Python 3.10.0
abcd@abcd:~/Python-3.10.0$ python3
Python 3.10.0 (default, Jan 25 2025, 19:38:31) [GCC 13.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

# Generating Python Virtual Environment

python3 -m venv myvenv

source myvenv/bin/activate

```
abcd@abcd:~/Python-3.10.0$ python3.10 -m venv myenv

abcd@abcd:~/Python-3.10.0$ source myenv/bin/activate_
```

Thus, Virtual Enviroment gets installed

```
(myenv) abcd@abcd:~/Python-3.10.0$ _
```

# Understanding the Errors

To understand the error; we try installing label-studio to get the pip and SSL errors

Pip install label-studio

```
(myenv) abcd@abcd://python-3.10.0$ pip install label-studio
ARRNING: pip is configured with locations that require TLS/SSL, however the ssl module in Python is not available.
MARRING: Retrying (Retry(total=4, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
MARRING: Retrying (Retry(total=3, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
MARRING: Retrying (Retry(total=2, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
MARRING: Retrying (Retry(total=1, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
MARRING: Retrying (Retry(total=2, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
MARRING: Retrying (Retry(total=3, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available."): /simple/label-studio/
Could not fetch URL https://pypi.org/simple/label-studio/ (Caused by SSLError("Can't connect to HTTPS URL because the SSL module is not available.")) - skipping
EFROR: Could not find a version that satisfies the requirement label-studio (from versions: none)

MARRING: Retrying (Retry(total=2, connect=None, read=None, redirect=None, status=None)) after connection broken by 'SSLError("Can't connect to HTTPS URL because the SSL module is not available.")) - skipping

MARRING: Retrying (Retry(total=2, connect=None, read=None, redirect=None, status=None))
```

Checking the certificates of pip

```
(myenv) abcd@abcd:"/Python-3.10.0$ pip install --upgrade certifi --user
ERROR: Can not perform a '--user' install. User site-packages are not visible in this virtualenv.
MARNING: pip is configured with locations that require TLS/SSL, however the ssl module in Python is not available.
Could not fetch URL https://pypl.org/simple/pip/: There was a problem confirming the ssl certificate: HTTPSConnectionPool(host='pypi.org', port=443): Max retrie
s exceeded with url: /simple/pip/ (Caused by SSLError("Can't connect to HTTPS URL because the SSL module is not available.")) - skipping
(myenv) abcd@abcd:"/Python-3.10.0$
```

```
wget https://www.openssl.org/source/openssl-1.1.1u.tar.gz
tar -xvzf openssl-1.1.1u.tar.gz
cd openssl-1.1.1u
./config --prefix=$HOME/openssl --openssldir=$HOME/openssl
make -j$(nproc)
make install
```

```
46 nistory
(myenv) abcd@abcd:~/Python-3.10.0$ wget https://www.openssl.org/source/openssl-1.1.1u.tar.gz_
```

```
(myenv) abcd@abcd:~/Python-3.10.0/openssl-1.1.1u$ ./config --prefix=$HOME/openssl --openssldir=$HOME/openssl
```

```
# exporting the flags and configuring to build OpenSSL with Python 3.10
export LDFLAGS="-L$HOME/openssl/lib"
export CPPFLAGS="-I$HOME/openssl/include"
./configure --prefix=$HOME/python3.10 --with-openssl=$HOME/openssl
--with-openssl-rpath=auto
make -j$(nproc)
```

#### make install

```
Operating system: x86_64-whatever-linux2
Creating OpenSSL version 1.1.1u (0x1010115fL) for linux-x86_64
Using os-specific seed configuration
Creating configdata.pm
Creating Makefile
жжж
                                                                                       жжж
       OpenSSL has been successfully configured
                                                                                        жжж
       If you encounter a problem while building, please open an issue on GitHub <a href="https://github.com/openssl/openssl/issues">https://github.com/openssl/openssl/issues</a> and include the output from the following command:
жжж
                                                                                       жжж
жжж
                                                                                       ***
жжж
                                                                                       жжж
***
             perl configdata.pm --dump
                                                                                       ***
        (If you are new to OpenSSL, you might want to consult the 'Troubleshooting' section in the INSTALL file first)
                                                                                       ***
                                                                                       ***
(myenv) abcd@abcd:~/Python-3.10.0/openssl-1.1.1u$
```

To know that openssl is installed with no errors we run the following command and then as nothing happens i ensures the installation

```
(myvenv) abcd@abcd:~/Python-3.10.0$ python3.10 -m ssl
(myvenv) abcd@abcd:~/Python-3.10.0$ _
```

### # Updating all the certificates

```
(myvenv) abcd@abcd:~/Python-3.10.0$ pip install --upgrade certifi
Collecting certifi
Downloading certifi-2024.12.14-py3-none-any.whl (164 kB)
| 164 kB 921 kB/s
Installing collected packages: certifi
Successfully installed certifi-2024.12.14
WARNING: You are using pip version 21.2.3; however, version 24.3.1 is available.
You should consider upgrading via the '/home/abcd/myvenv/bin/python3 -m pip install --upgrade pip' command.
(myvenv) abcd@abcd:~/Python-3.10.0$
```

# Trying to install label-studio

Pip install label-studio

```
Doubloading botocore-1.36.6-py3-none-any_whl (13.8 MB)

Collecting pyt=2023.8 p=2022.1

Using cached pyt=2022.7.1-py2.py3-none-any_whl (499 kB)

Collecting humanisignid-dri-yassy=1.21.10.post1

Doubloading humanisignid-dri-yassy=1.21.10.post1

Doubloading humanisignid-fri-yassy=1.21.10.post1-py3-none-any_whl (4.3 MB)

Collecting openaic2.0.8.>=1.10.0

Compared openaic2.0.8.>=1.10.0

Compared openaic2.0.8.>=1.10.0

Compared openaic2.0.8.>=1.10.0

Collecting openaic2.0

Collecting openaic2.0

Collecting openaic2.
```

In my laptop as there was no space left we had to change our PC; where we reentered all the above screenshots; **And where successful in installing label-studio** 

# Running label-studio

After running label-studio we got the following output as shown in the video

 $\underline{https://drive.google.com/file/d/1MIducgEyZqShU6PHpnZt7qcm9WH-nZwR/view?usp=drive\_link}$ 

As shown; the server is able to install the initial time however it shows that sqlite is required. We tried installing sqlite; using the commands below

wget https://www.sqlite.org/2025/sqlite-autoconf-3480000.tar.gz

tar -xvzf sqlite-autoconf-3480000.tar.gz

cd sqlite-autoconf-3480000

./configure --prefix=\$HOME/sqlite

make

make install

# export PATH=\$HOME/sqlite/bin:\$PATH

# sqlite --version

After which we will be able to use label-studio; which should show output like this is the cli. However; we encountered a severe issue; and whole of our linux got crashed down while installing sqlite. It removed all the programs including commands like is and pwd.

```
=> Database and media directory: C:\Users\Admin\AppData\Local\label-studio\label-studio
=> Static URL is set to: /static/
=> Database and media directory: C:\Users\Admin\AppData\Local\label-studio\label-studio
=> Static URL is set to: /static/
Read environment variables from: C:\Users\Admin\AppData\Local\label-studio\label-studio\.env
get 'SECRET_KEY' casted as '<class 'str'>' with default ''
Starting new HTTPS connection (1): pypi.org:443
https://pypi.org:443 "GET /pypi/label-studio/json HTTP/1.1" 200 33651
C:\Users\Admin\anaconda3\Lib\site-packages\paramiko\pkey.py:82: CryptographyDeprecationWarning: TripleDES has been moved
to cryptography.hazmat.decrepit.ciphers.algorithms.TripleDES and will be removed from this module in 48.0.0.
"cipher": algorithms.TripleDES,
C:\Users\Admin\anaconda3\Lib\site-packages\paramiko\transport.py:219: CryptographyDeprecationWarning: Blowfish has been
moved to cryptography.hazmat.decrepit.ciphers.algorithms.Blowfish and will be removed from this module in 45.0.0.
"class": algorithms.Blowfish,
C:\Users\Admin\anaconda3\Lib\site-packages\paramiko\transport.py:243: CryptographyDeprecationWarning: TripleDES has been
moved to cryptography.hazmat.decrepit.ciphers.algorithms.TripleDES and will be removed from this module in 48.0.0.
"class": algorithms.TripleDES,
January 26, 2025 - 18:14:21
Django version 4.2.18, using settings 'label_studio.core.settings.label_studio'
Starting development server at http://0.0.0.0:8080/
Quit the server with CTRL-BREAK.
```

And after doing portforwarding it opens label studio in the browser

