Steps to install Qiskit

Requirment:

Ubuntu >16.04
Python >3.6
Anaconda
Pip

Step 1: Create conda environment:

Conda create -n <Name of your environment> python=<your_version>
Eg: conda create -n qenv python=3.11

```
(base) cdac1@cdac1:~$ conda create -n qenv python=3.11
Collecting package metadata (current_repodata.json): done
Solving environment: done


==> WARNING: A newer version of conda exists. <==
  current version: 23.7.4
  latest version: 23.11.0

Please update conda by running
```

Step 2: Install Qiskit

conda activate <Name of your environment>
Eg: conda activate qenv

```
Downloading and Extracting Packages

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate qenv
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) cdac1@cdac1:~$ conda activate qenv
(qenv) cdac1@cdac1:~$
```

pip install qiskit

```
(base) cdac1@cdac1:~$ conda activate qenv
(qenv) cdac1@cdac1:~$ pip install qiskit
Collecting qiskit
  Using cached qiskit-0.45.1-py3-none-any.whl.metadata (12 kB)
Collecting qiskit-terra==0.45.1 (from qiskit)
  Using cached qiskit_terra-0.45.1-cp38-abi3-manylinux_2_17_x86_64.manylinux2014
_x86_64.whl.metadata (12 kB)
Collecting rustworkx>=0.13.0 (from qiskit-terra==0.45.1->qiskit)
  Using cached rustworkx-0.13.2-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_
x86_64.whl.metadata (10 kB)
Collecting numpy<2,>=1.17 (from qiskit-terra==0.45.1->qiskit)
  Using cached numpy-1.26.2-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_
64.whl.metadata (61 kB)
Collecting ply>=3.10 (from qiskit-terra==0.45.1->qiskit)
  Using cached ply-3.11-py2.py3-none-any.whl (49 kB)
Collecting psutil>=5 (from qiskit-terra==0.45.1->qiskit)
  Using cached psutil-5.9.7-cp36-abi3-manylinux_2_12_x86_64.manylinux2010_x86_64
```

Step 3: Install Qiskit-Aer
Required to simulate quantum circuits and explore the behaviour of quantum algorithms in a simulated environment.

pip3 install qiskit-aer