

## INSTRUCTION FOR INSTALLING AND RUNNING QISKIT

Source: <https://docs.quantum.ibm.com/start/install>

1. If you do not already have it, install the latest version of Python (the programming language) on your computer:

<https://www.python.org/>

2. If pip is not included with your Python installation, install it:

<https://pip.pypa.io/en/stable/installation/>

3. Create a directory in your computer to run your qiskit codes; named it “qip-qiskit”. Open a shell command window and go to that directory.

4. Within that directory, create a Python virtual environment through the commands:

- for Mac or Linux

```
python3 -m venv /path-to-qip-qiskit
source /path-to-qip-qiskit
```

- for Windows

```
python3 -m venv c:\path-to-qip-qiskit
c:\path-to-qip-qiskit\Scripts\Activate.ps1
```

where “path-to-qip-qiskit” is the path in your system to the directory qip-qiskit

5. Install Qiskit and a couple more useful packages through the commands:

```
pip install qiskit[visualization]
pip install qiskit-aer
pip install qiskit-ibm-runtime
```

6. Use the command line to install JupyterLab for composing and executing Qiskit codes:

```
pip install jupyterlab
```

7. Now you are ready to start a jupyter session and create/open notebooks. Enter the command

```
jupyter lab
```