**Qiskit: Quantum Information Software Kit**

* It is the world's most popular software stack for quantum computing.
* It is python-based SDK.
* It is open source.
* From Qiskit- 1.0 onwards, the developers claim that it is more stable.

**Installation Steps:**

1. Install Miniconda or Anaconda.
2. Create a new environment, for self -contained environment with specific python versions and packages, so that the project run consistently, preventing conflicts.

For that open Anaconda/Miniconda -prompt, then type the below command;

* conda create --name  *<environment-name>*
  + *#*Create an environment,with the name *environment-name*
* conda activate *<environment-name>* 
  + *#*Activate the created environment.
* conda install pip.

1. Install the Qiskit SDK

* pip install qiskit

1. If you plan to run jobs on quantum hardware, also install Qiskit Runtime

* pip install qiskit-ibm-runtime

1. If you intend to use visualization functionality or Jupyter notebooks.

* pip install qiskit[visualization]

1. If you want to run a Jupyter notebook with the Qiskit packages you just installed, you need to install Jupyter in your environment.

* pip install jupyter

1. Install other visualization packages as well.

* pip install matplotlib
* pip install pylatexenc