



We are working to build an open quantum ecosystem!

# QUANTUM KEY DISTRIBUTION

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## INSTALLATION GUIDE

This document has been prepared by Sabah Ud Din Ahmad. For any queries and improvements, contact [here](#).



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## Welcome to QWorld's tutorial on "Quantum Key Distribution"

This tutorial consists of a collection of Jupyter notebooks.

### Prerequisites

- Completion of QBronze
- Basic knowledge about Quantum Mechanics, programming using Python, and Qiskit library in Python

### Software requirements

Jupyter Notebook, Python 3, Qiskit

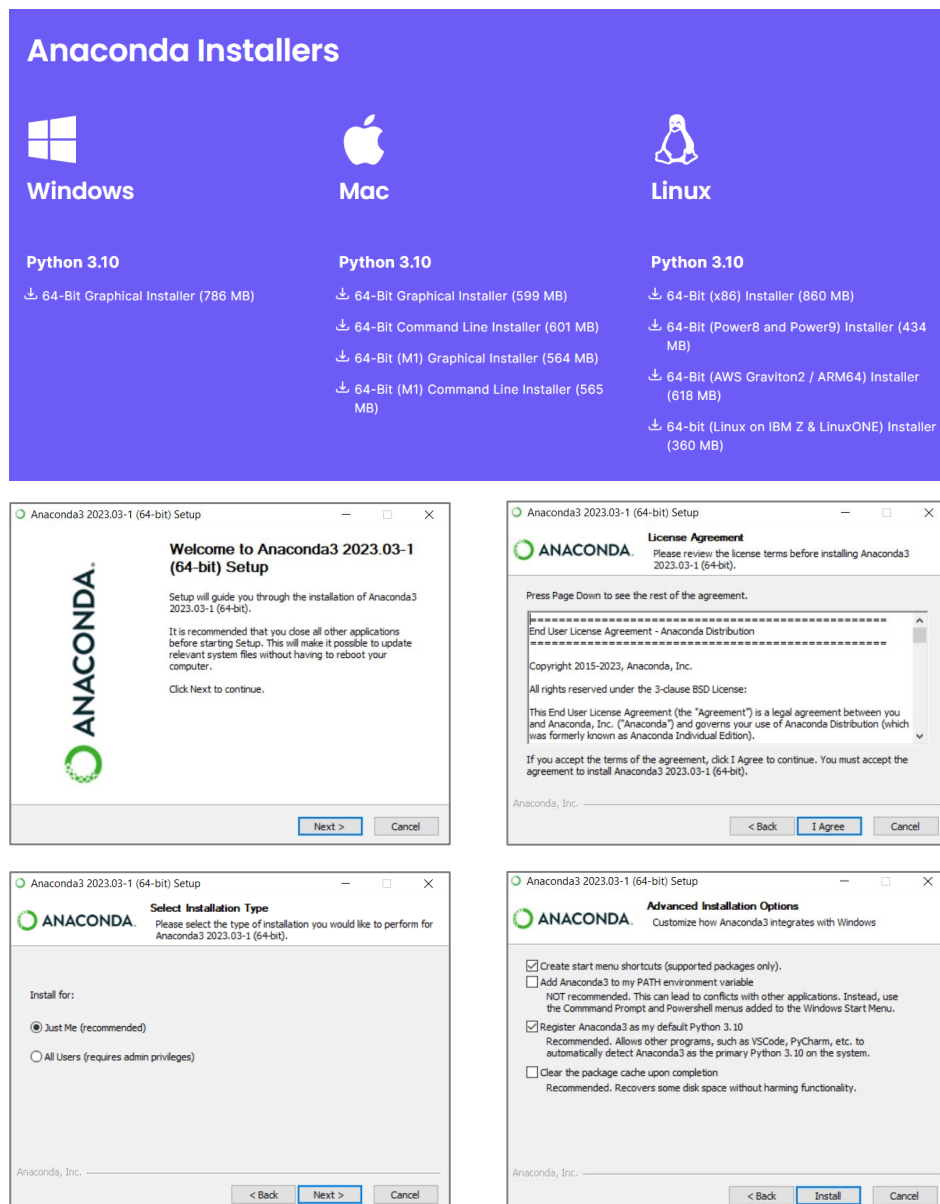
**Note:** If you have already installed Jupyter Notebook, you can proceed directly to [Step 3: Downloading the QKD notebooks](#).

## Step 1: Installing Anaconda®

Installing Anaconda® will install Jupyter Notebook as well as the required Python compiler and libraries.

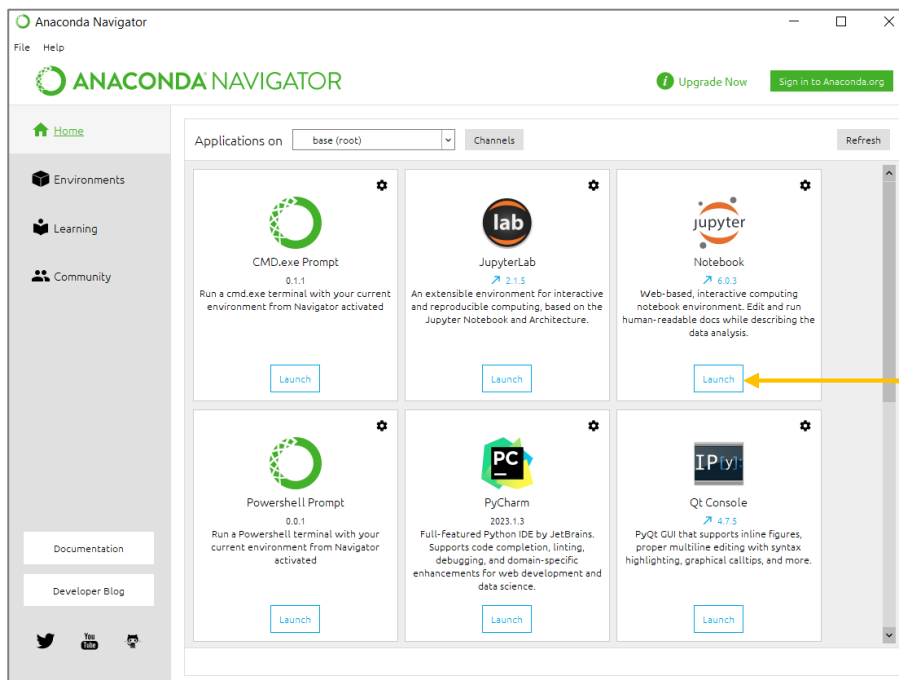
[Click here to download Anaconda](#)

Select your preferred operating system and download the setup file. Run the setup file after downloading.



## Step 2: Setting up Jupyter Notebook

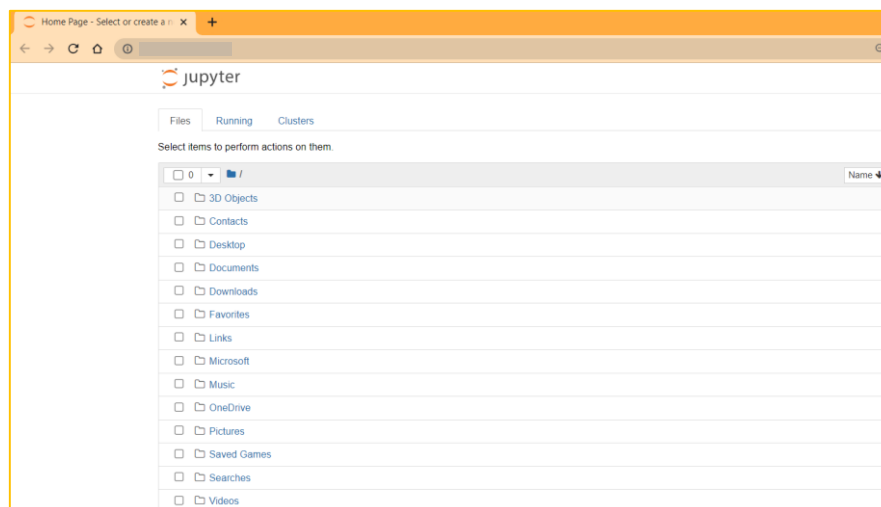
Open Anaconda Navigator (use the Windows Search Bar).



If Jupyter Notebook is installed by default, you can launch it by clicking on "Launch".

Else, you will see the "Install" button instead of "Launch". Install it.

Once installed, run the Jupyter Notebook from the Start Menu. A command prompt or powershell window should appear followed by an opening of a web browser page as below.

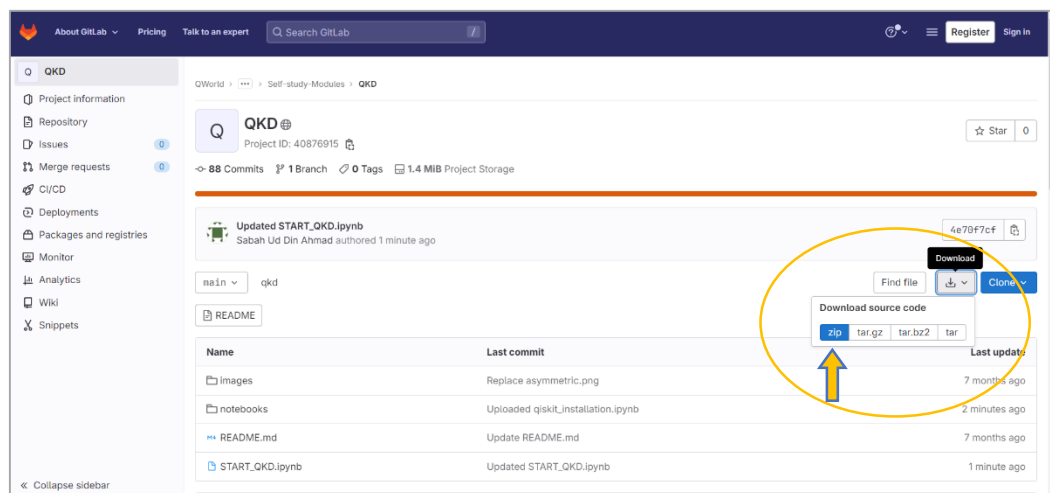


**Note:** Keep the command prompt window open while working.

## Step 3: Downloading the QKD notebooks

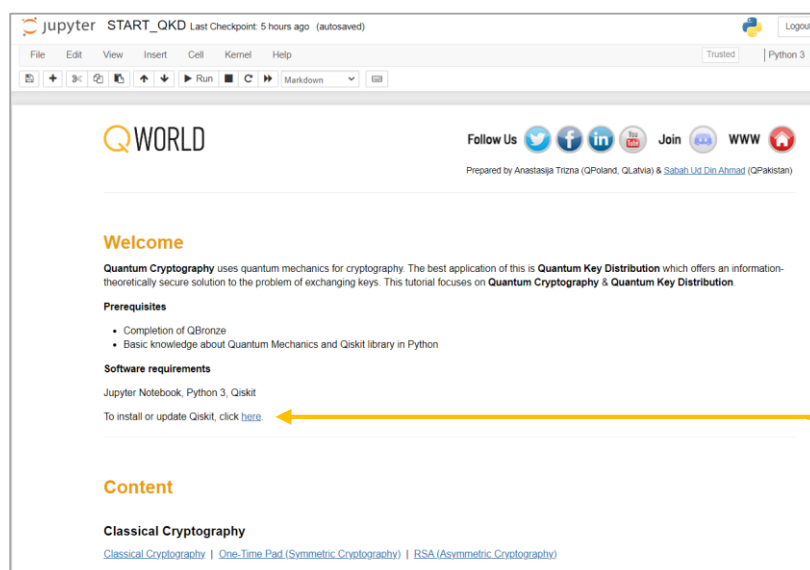
Download the QWorld's "Quantum Key Distribution" notebooks from the following link.

[Download](#)



The material will be downloaded as a zip folder. Extract the files to one of the accessible directories such as Desktop, Documents, or Downloads, etc.

Open that folder through Jupyter Notebook. Open the notebook "START\_QKD.ipynb" and start learning!



Before diving into the content, make sure you have Qiskit installed in your system.