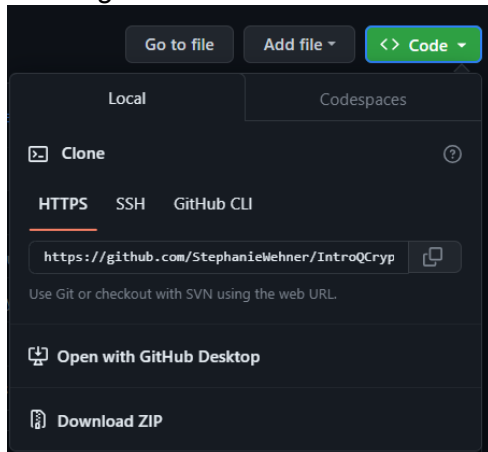


Instructions to run the Julia sheets on Jupyter on your PC:

1. Download the Julia sheets from <https://github.com/StephanieWehner/IntroQCryptoBook> by clicking on the green “Code” button and “Downloading a ZIP”



2. Extract the files in the ZIP file to a folder.
3. **Delete the files “Project.toml” and “environment.yml”.**
This file is for running the sheets at mybinder.org, and will prevent you from running the sheets properly on a local Julia installation.
4. Download python3 (version 3.10) from <https://www.python.org/downloads/> and install it. Ensure that python3 is in the PATH of your system (refer <https://docs.python.org/3/using/windows.html> for more information.)
5. Install jupyter-notebook through pip:
 - Open a terminal, command prompt or PowerShell.
 - Run on the terminal,
`pip install notebook`
6. Download Julia (version 1.9) from <https://julialang.org/downloads/> and install it. Ensure that Julia is in the PATH of your system (refer <https://julialang.org/downloads/platform/> for more information.)
7. Install necessary packages for Julia
 - Open a terminal, command prompt or PowerShell.
 - Run Julia by executing “julia” without the quotation marks in the terminal.
 - Type “]” to enter package mode.
 - Type and run
`add Interact IJulia PyPlot LaTeXStrings WebIO`
8. Install WebIO extension through pip:
 - Open a terminal, command prompt or PowerShell.
 - Run
`python3 -m pip install --upgrade webio_jupyter_extension`
on the terminal.
 - Ensure that WebIO extension is installed for jupyter notebook.
Running “`jupyter nbextension list`” on the terminal should return an entry
`webio-jupyter-nbextension/nbextension enabled`
- Validating: ok
9. Launch Jupyter notebook from a terminal/command prompt/PowerShell:
`jupyter notebook`
10. Navigate to the folder containing the files from <https://github.com/StephanieWehner/IntroQCryptoBook> on the Jupyter notebook interface.
11. Navigate to the required folder and open the relevant Jupyter sheet (.ipynb file) from the Jupyter notebook interface. We would advise you to start with the notebook “IntroQCryptoBook/JuliaSheets/Getting_Started-BOOK.ipynb”.
12. Go through the Jupyter notebook, understanding the existing blocks and completing the exercises.
13. Have fun!

Jupyter-lab vs Jupyter-notebook

Note that the interactive elements from Julia do not work very well on Jupyter-lab, while they work perfectly on Jupyter-notebook. We highly recommend sticking to the Jupyter-notebook interface for this reason. However, if you are forced to use the Jupyter-lab interface, refreshing the page may help the interactive elements work:

1. Run a block of code with interactive elements, and try changing the values in the slider. If it works, congrats!. If it does not affect the output,
2. Refresh the page, but do not restart the kernel
3. Re-run the same block of code that had the interactive element.

You only have to refresh the page once per session, so it is not very cumbersome. However, it does lead to some extra steps, and it is not guaranteed to work on every system, so sticking to Jupyter-notebooks may be your best bet.

Please read the disclaimer about technical support at
<https://github.com/StephanieWehner/IntroQCryptoBook>.

The sheets were tested on a system with the following package versions. This may help you sort out any technical difficulties yourself.

Package versions for Julia (version 1.9):

[7073ff75] IJulia v1.24.2
[c601a237] Interact v0.10.5
[b964fa9f] LaTeXStrings v1.3.0
[d330b81b] PyPlot v2.11.1
[0f1e0344] WebIO v0.8.21

Relevant packages from pip (python 3.10.10):

ipykernel	6.23.1
ipython	8.14.0
ipython-genutils	0.2.0
ipywidgets	8.0.6
jupyter	1.0.0
jupyter_client	8.2.0
jupyter-console	6.6.3
jupyter_core	5.3.0
jupyter-events	0.6.3
jupyter-lsp	2.2.0
jupyter_server	2.6.0
jupyter_server_terminals	0.4.4
matplotlib-inline	0.1.6
nbclassic	1.0.0
nbclient	0.8.0

nbconvert	7.4.0
nbformat	5.9.0
notebook	6.5.4
webio-jupyter-extension	0.1.0