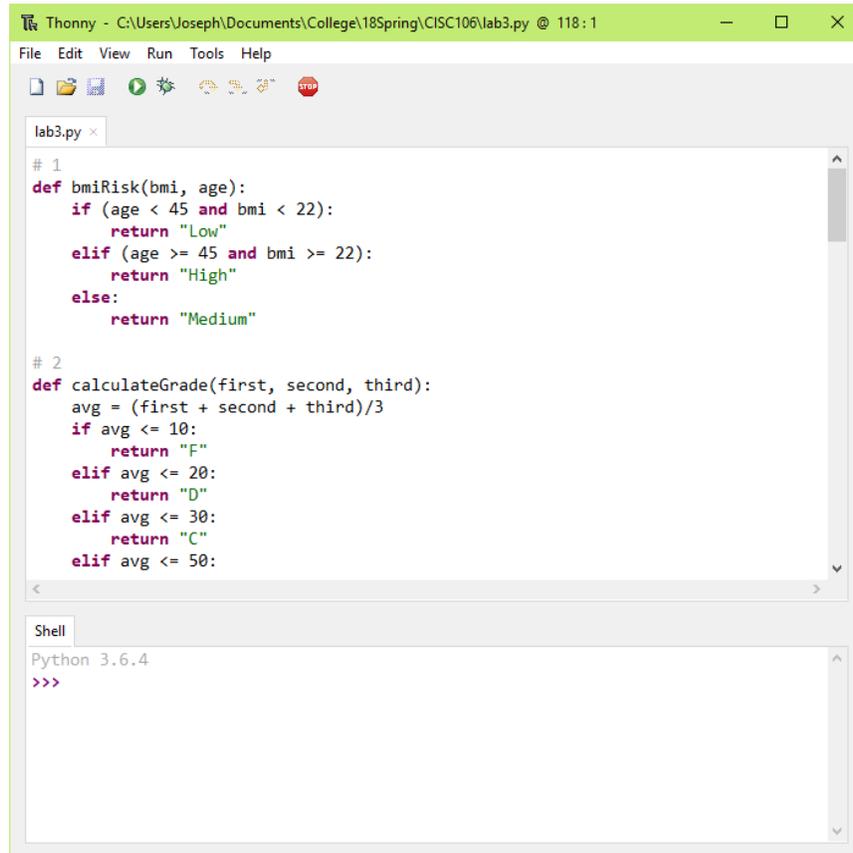


Installing matplotlib in Thonny

Please note the process may be slightly different on Macs.

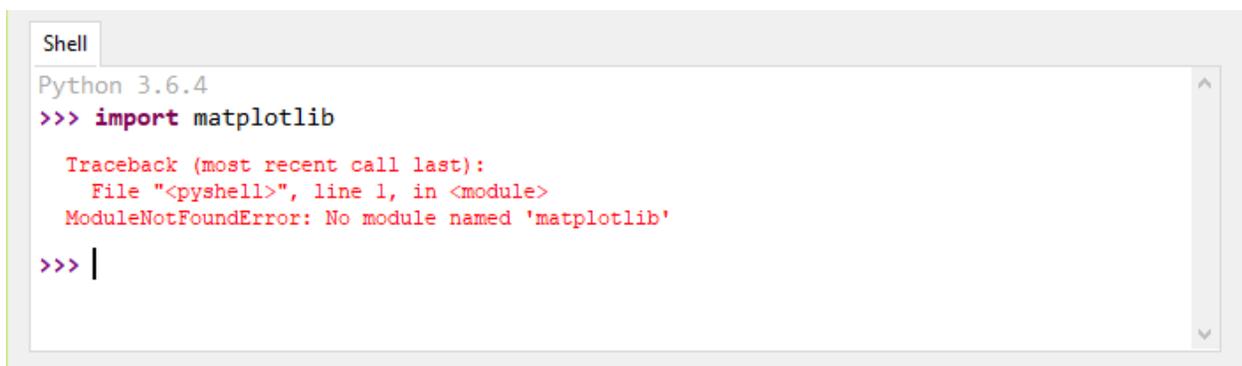
1. Open Thonny:



The screenshot shows the Thonny IDE interface. The main editor window displays a Python script named 'lab3.py' with two functions. The first function, 'bmiRisk', takes 'bmi' and 'age' as arguments and returns 'Low', 'High', or 'Medium' based on the input. The second function, 'calculateGrade', takes three arguments and returns a grade from 'F' to 'C' based on their average. Below the editor is a 'Shell' window showing the Python 3.6.4 prompt '>>>'.

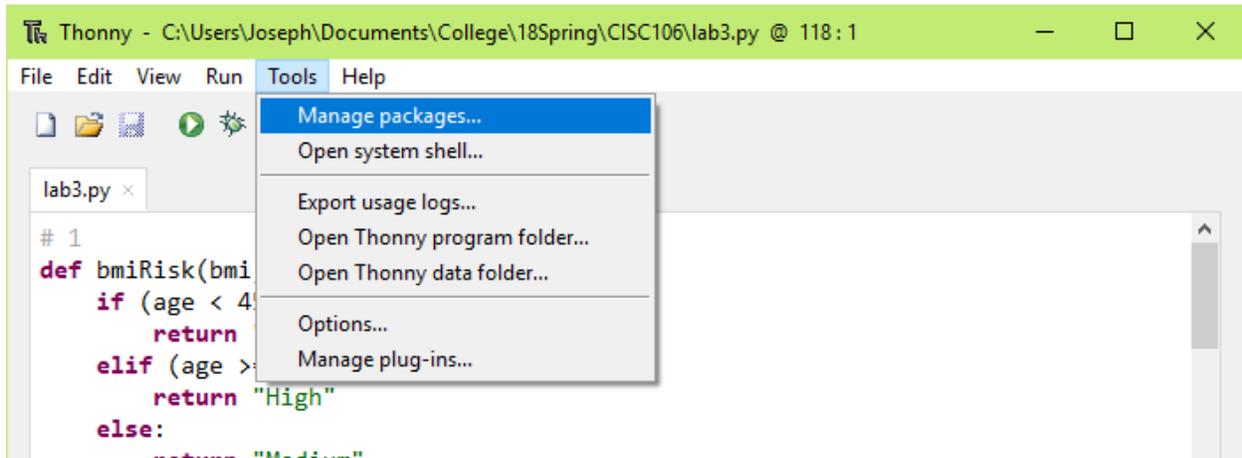
2. To confirm that matplotlib is not already installed, you should get an error when you type the following into the shell:

```
import matplotlib
```

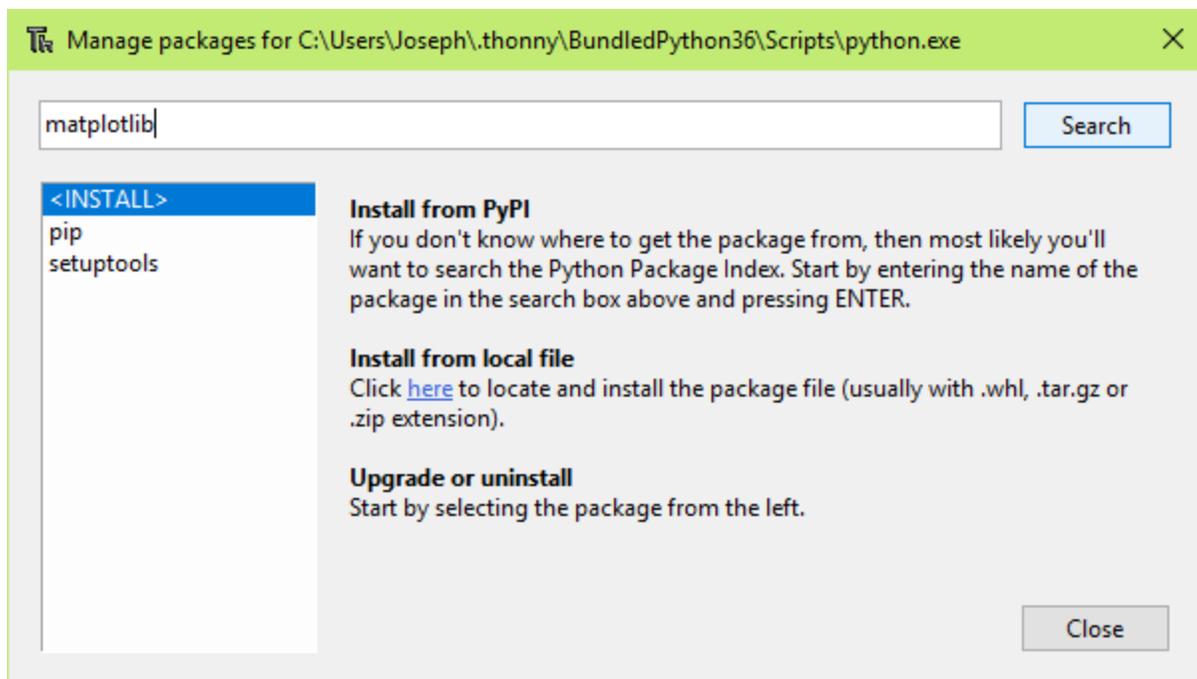


The screenshot shows the 'Shell' window in Thonny. It displays the Python 3.6.4 prompt '>>>' followed by the command 'import matplotlib'. The output shows a 'Traceback (most recent call last):' error, indicating that the 'matplotlib' module is not found. The error message is: 'ModuleNotFoundError: No module named 'matplotlib''. The prompt '>>>' is followed by a vertical bar '|', indicating the next command is ready to be entered.

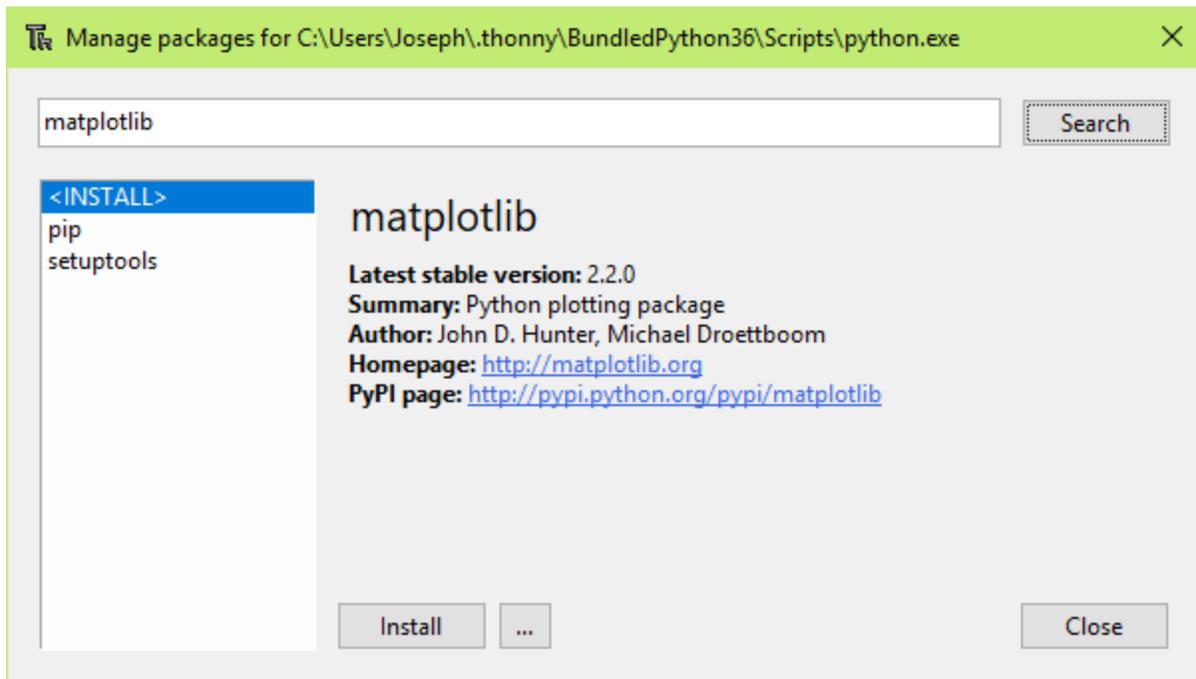
3. Now we need to install matplotlib! Select “Tools → Manage packages...”



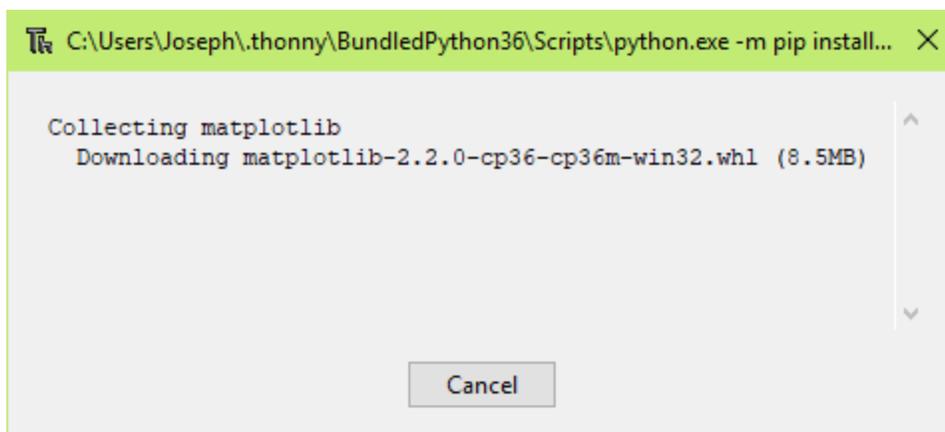
4. You may need to wait a bit for the package manager to load. Next, enter “matplotlib” in the box and click “Search”



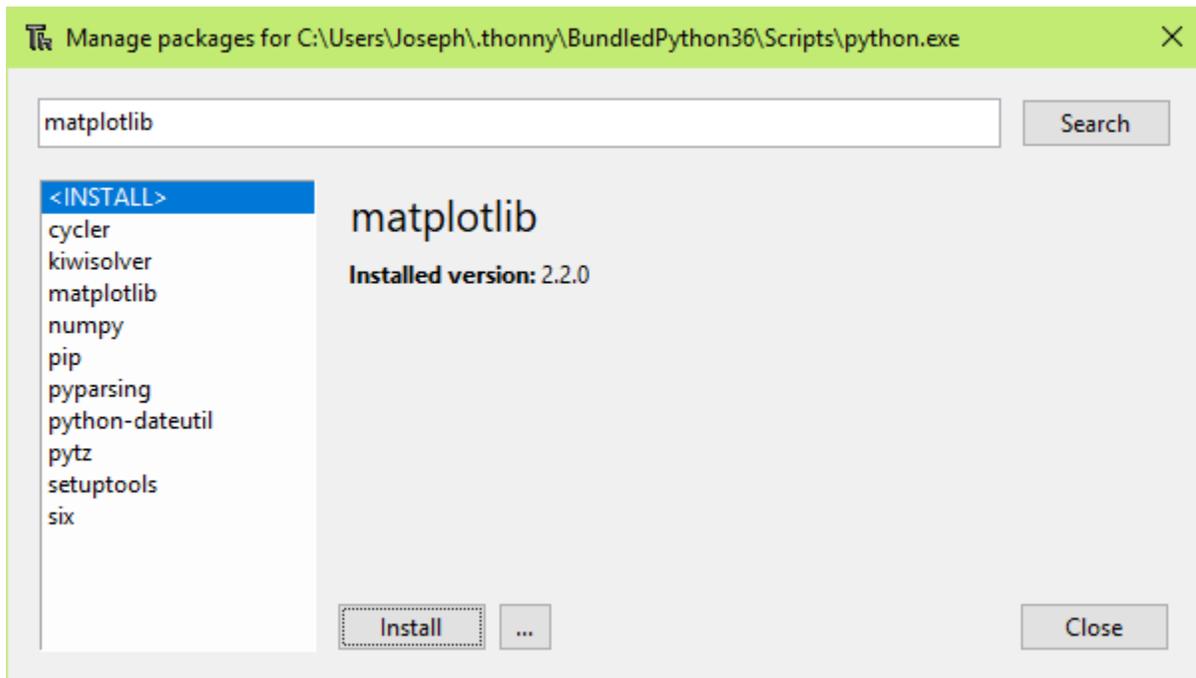
5. Once that loads, click “Install”



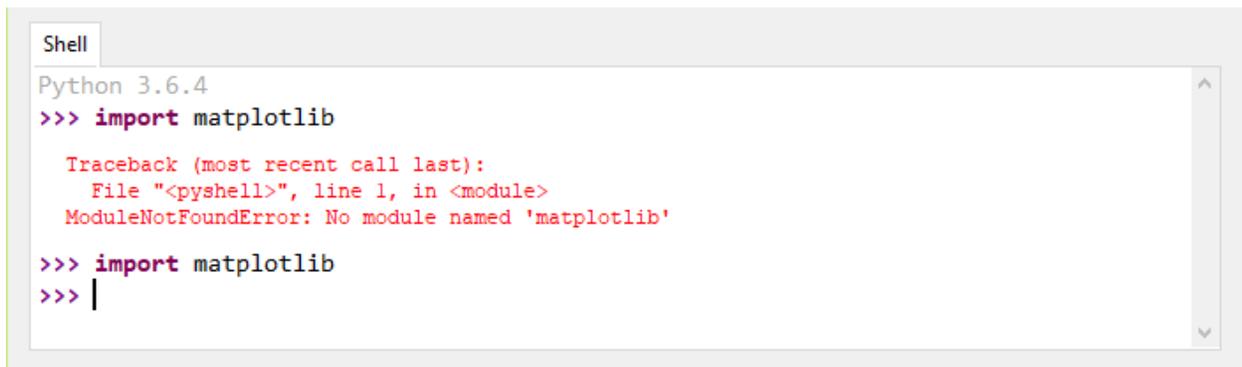
6. This process may take a while, as Thonny gathers and installs the necessary packages.



7. Once that finishes, matplotlib should now be installed! Click “Close”



8. To confirm the installation, try importing matplotlib again. You should get no errors this time.



9. To get a basic example of how matplotlib works, create a new .py file with the following text:

```
import matplotlib.pyplot as plt
plt.plot([1, 2, 3, 4])
plt.ylabel('some numbers')
plt.show()
```

10. Running this should give you a simple graph