

# Installing Python Speech-To-Text (STT) App

v1.0

Note: I highly recommend you follow the instruction as much as possible unless you know what you are doing. If you have any questions, please feel free to reach directly to me at [schanate2017@student.hult.edu](mailto:schanate2017@student.hult.edu) with a `[(cohort_name)] STT Setup Help` in the subject line.

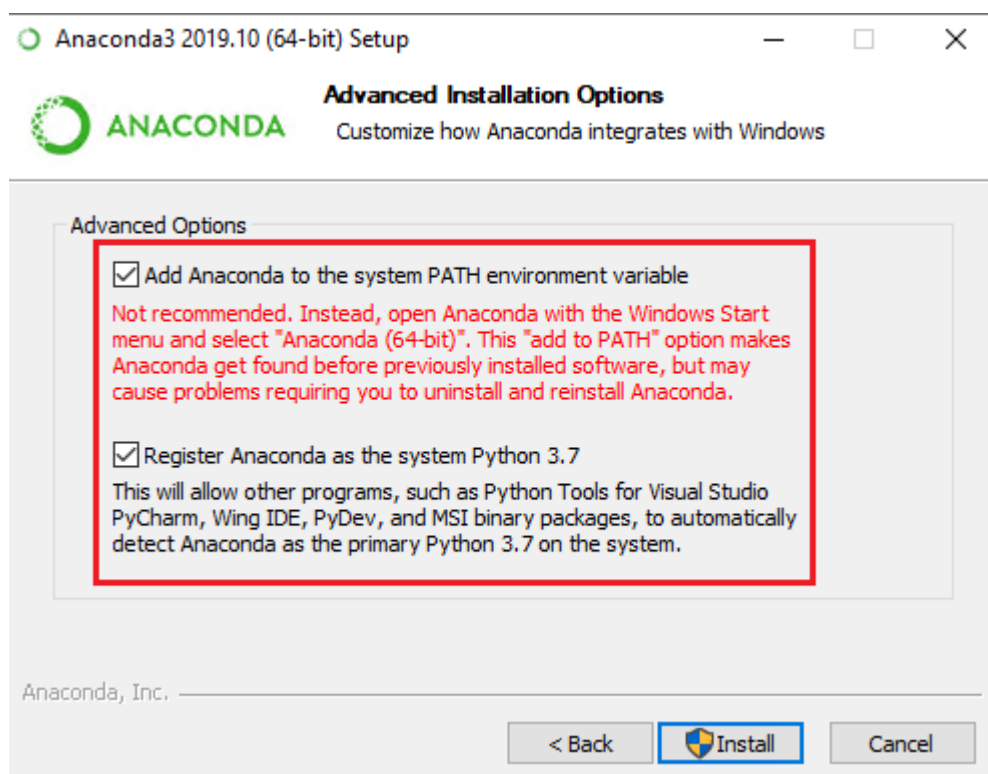
## Prerequisite

- [NLP Python app.zip](#) from Class 2 in MyCourses
- [Visual Studio Code](#) (Windows user: Recommend downloading **System Installer 64 bit**)
- [Anaconda 2019.10 with Python 3.7](#)
- Internet-connection (installation process requires downloading several files, please be sure to connect to a fast & reliable source)

## Installing Anaconda

Open the downloaded **Anaconda 2019.10 with Python 3.7** and proceed as instructed.

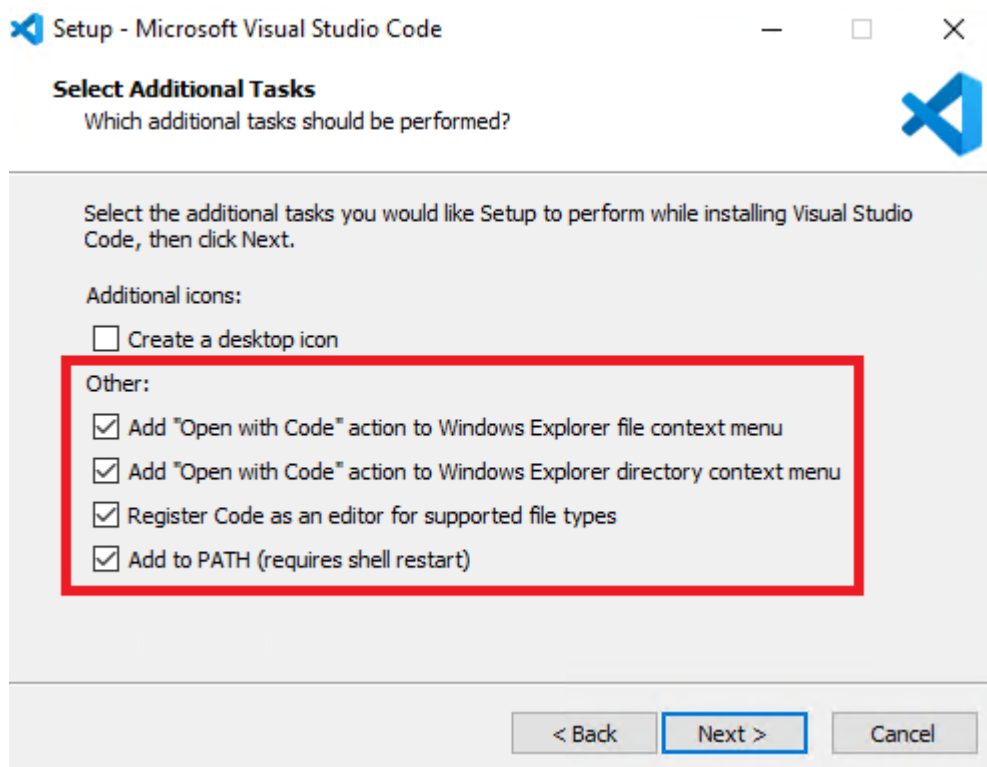
**Windows:** When see this screen, please check all the box as shown below.



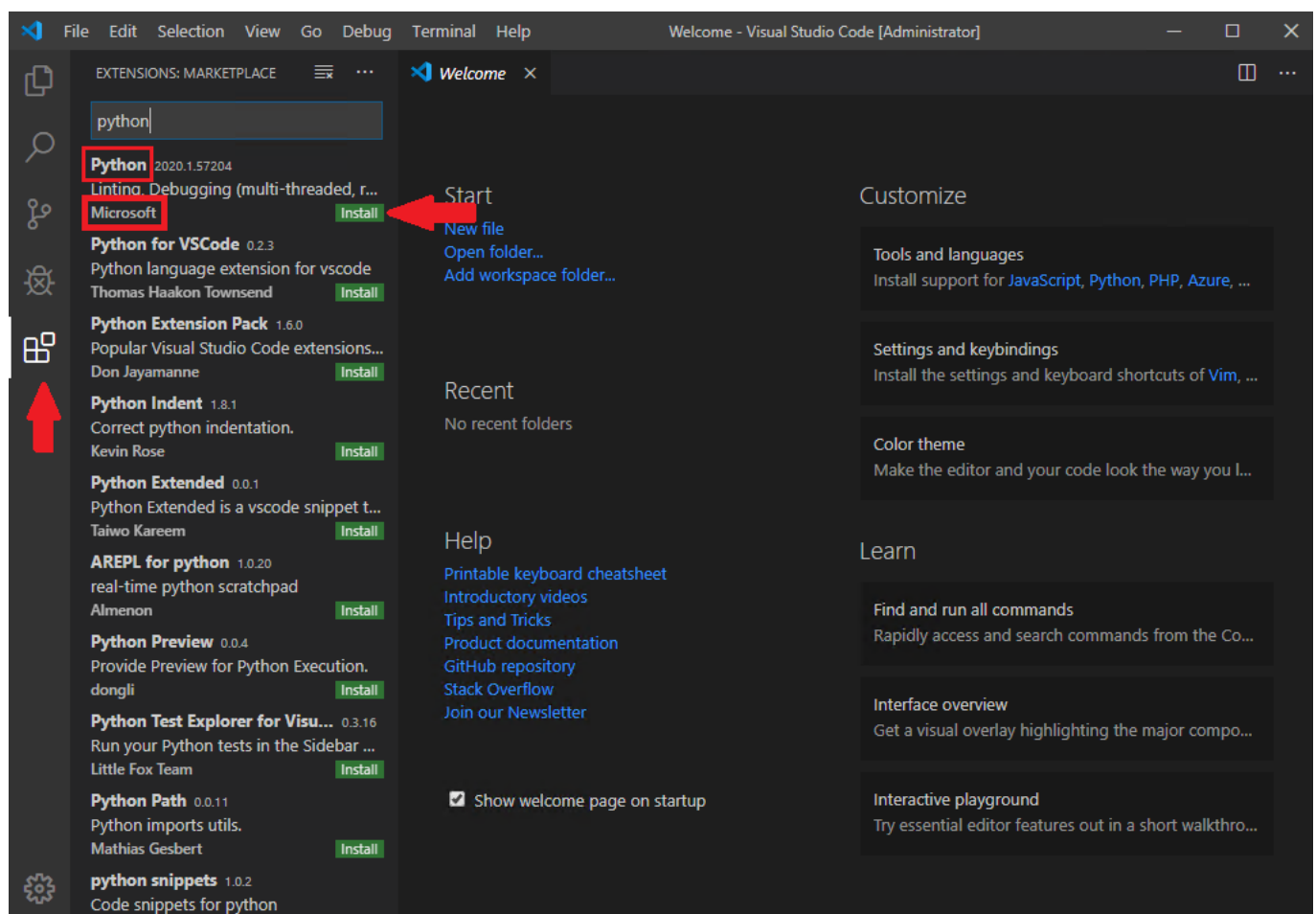
## Installing Visual Studio Code (VS Code)

Open the downloaded **VS Code installer** and proceed as instructed.

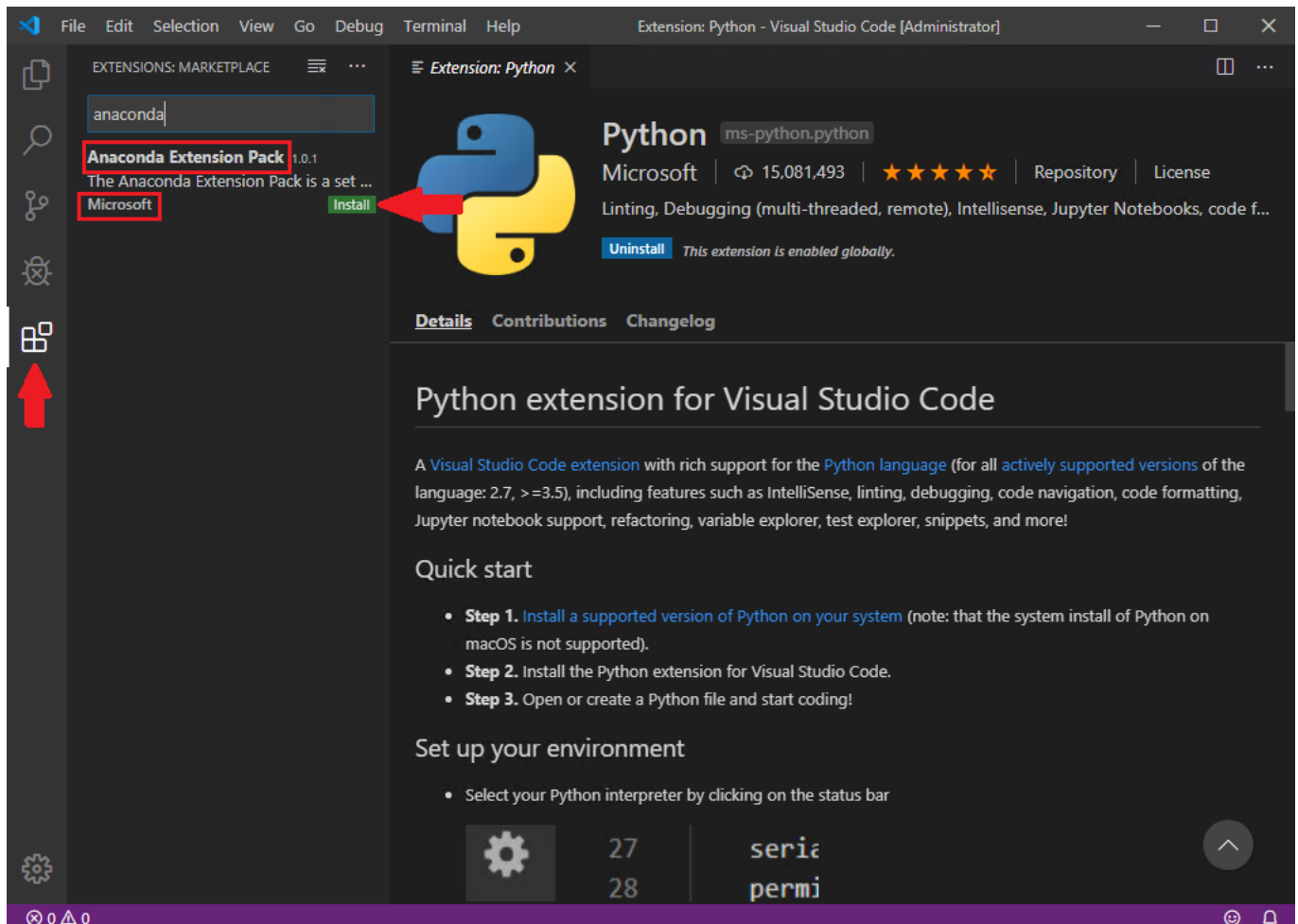
**Windows:** When see this screen, please check all the box as shown below.



After the installation process is completed, open VS Code and install **Python** extension.



Install **Anaconda Extension Pack**



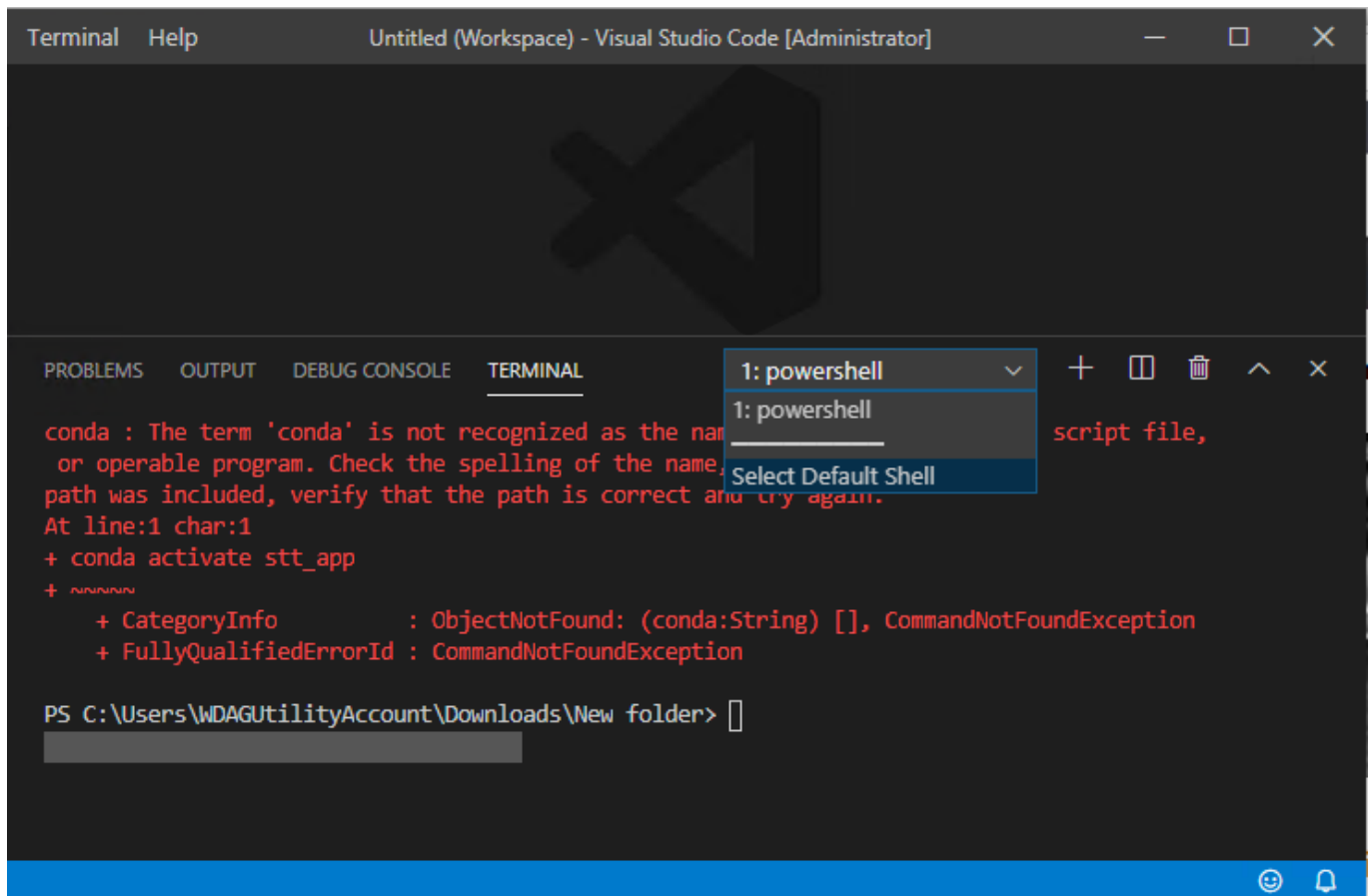
## Windows additional step

Since Anaconda doesn't work well with **PowerShell** we have to switch the default shell in VS Code to **Command Prompt (cmd)**

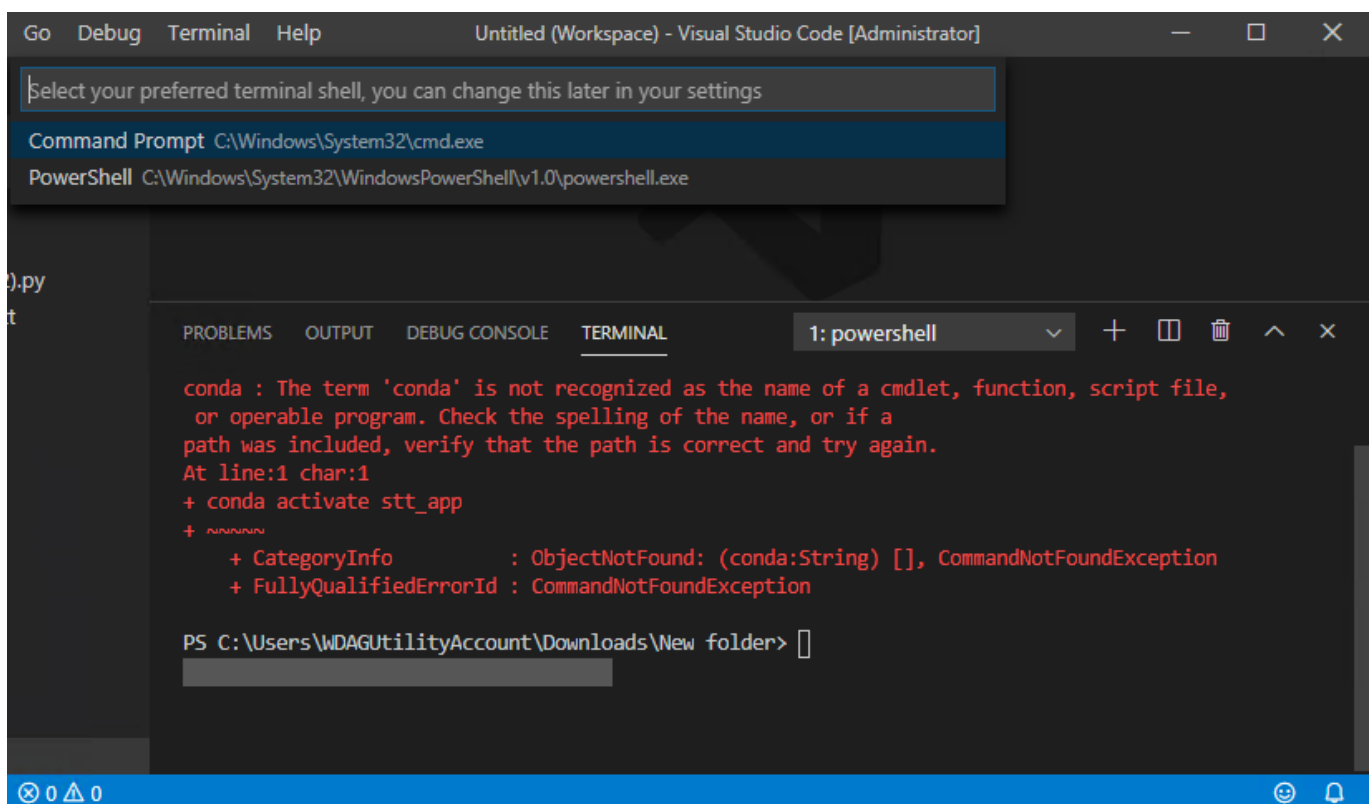
First, press **Ctrl+`** (grave accent key) to show the Terminal dialog

Then go to **Select Default Shell** option

Note: If you don't see the option, try pressing the **+** (plus) sign next to it.



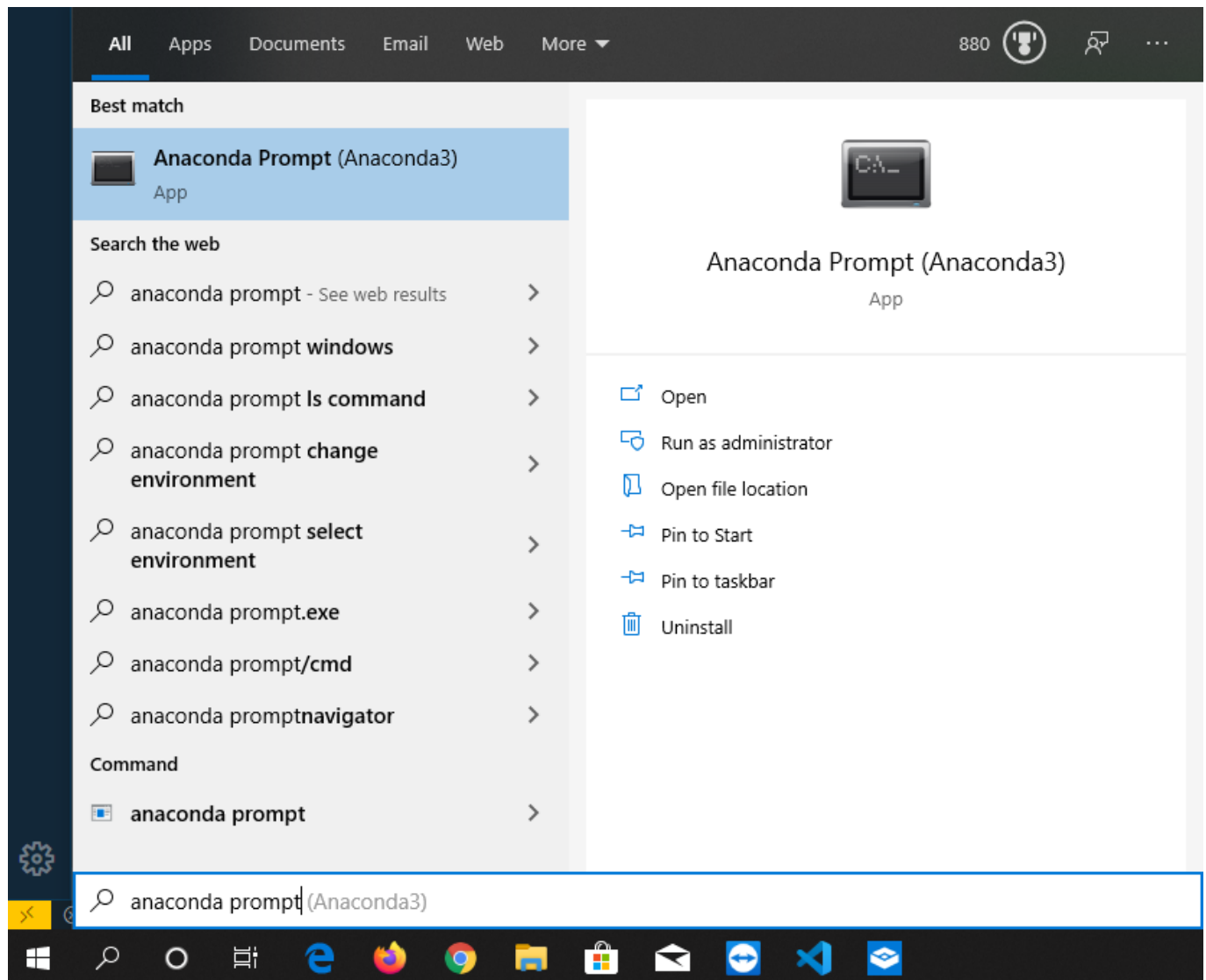
Then select **Command Prompt**



After done please exit/close VS Code.

## Installing Python packages for Python Speech-To-Text App

Reopen VS Code then press **Ctrl+(grave accent key)** to show the Terminal dialog. **\*\*Windows Users:\*\*** make sure that the terminal dropdown menu is show **cmd** and **NOT powershell** otherwise redo previous step.



Run the following command in your terminal:

Update every packages in conda

```
conda update -y --all
```

Create and activate new environment for this project

```
conda create -y --name stt_app  
conda activate stt_app
```

Note: Check which environment you are in. The default environment is **base**, try to avoid development in the **base** environment and have different environment per project to prevent future conflict between multiple projects.

```
(base) C:\Users\WDAGUtilityAccount>conda activate stt_app  
(stt_app) C:\Users\WDAGUtilityAccount>_
```

Install **Python 3.7**, **Kivy**, **SpeechRecognition**, and **PyAudio**

Note: Unlike `pip install`, using `conda install` will handle all the prerequisite binaries for you too.

Note: `-y` argument skips confirmation process when installing new packages

`-c` argument is for specifying the channel the host the packages (this case it's `conda-forge` and `anaconda`)

```
# Please run each command line-by-line in the given order only  
  
conda install -y python=3.7  
conda install -y -c conda-forge speechrecognition  
conda install -y -c conda-forge kivy  
conda install -y -c anaconda pyaudio
```

After everything is successfully installed, you may close VS Code.

## Testing

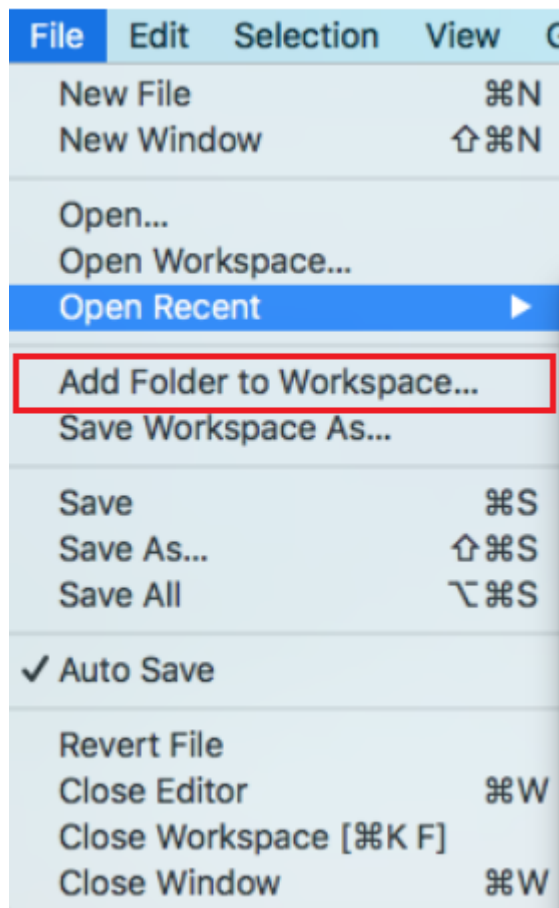
Extract the `NLP Python app.zip`

Then open the extracted folder (folder should named "`Python code with new to append`") in **VS Code**.

**Windows:** Right-click -> Open with Code

**macOS** Open `VS Code` and Go to `File` -> Add Folder to Workspace... Then select the extracted folder.

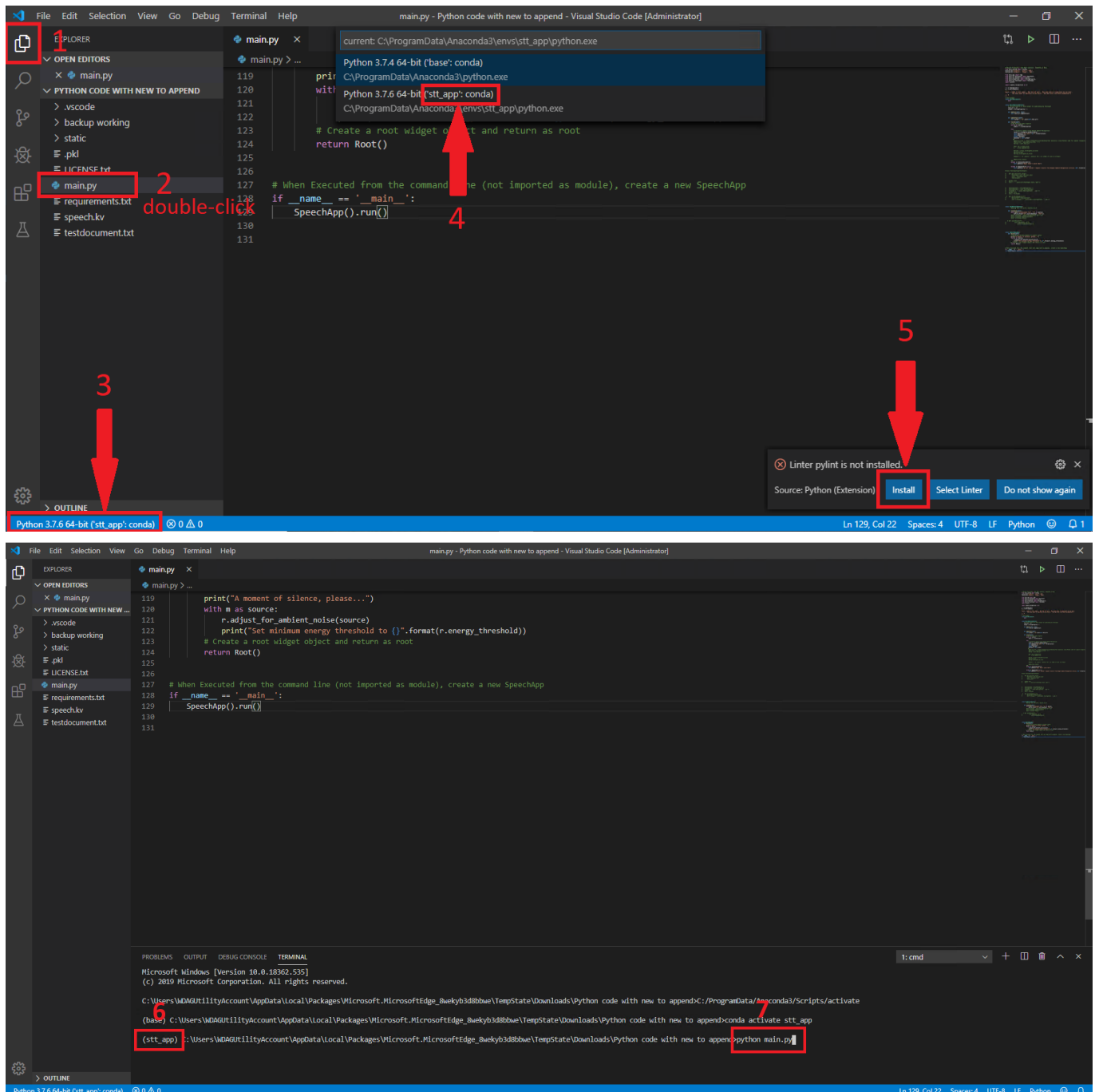
macOS Note: Please ignore the blue highlighted Open Recent, I took a screenshot from somewhere else...



Now opening the `main.py` file by double-clicking the file on the left pane. VS Code will recognize that you are trying to run a Python code so it will adjust itself by show tools that are related to running Python.

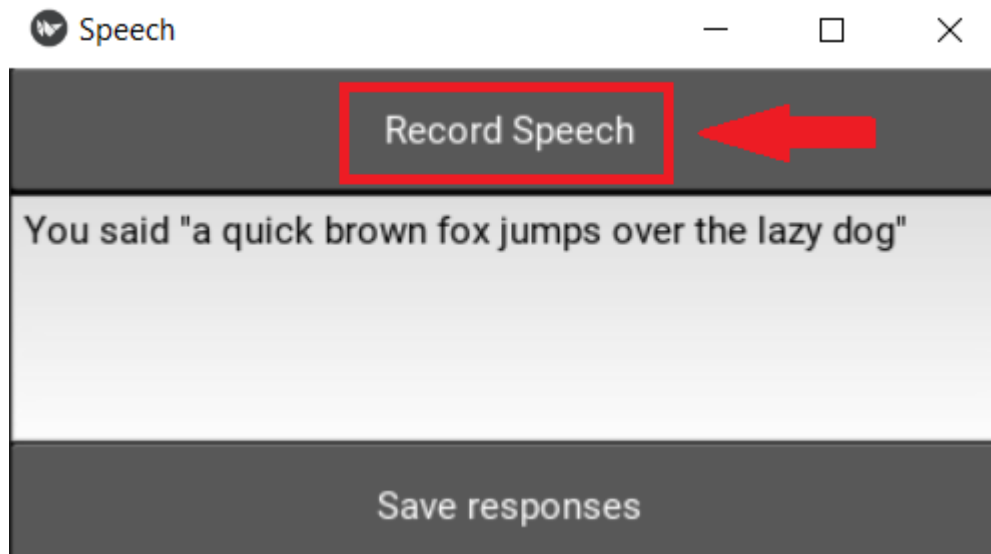
Now you will have to select the interpreter for this project by selecting the `stt_app` environment that you just created.

1. Select `Explorer` tab
2. Double-click on `main.py` file to open the source code
3. Select Python interpreter
4. Select `stt_app` as interpreter
5. (optional) Install pylint to help you have a better Python coding experience in VS Code.  
When asked, click `Install using Conda`
6. Open terminal by pressing `Ctrl+``. VS Code should automatically run change your environment to `stt_app`. Otherwise, manually run `conda activate stt_app`.
7. Enter `python main.py` to run the app



If the installation is successful, you should be able to see the app shows up and allow you to try recording your speech.





Have any questions? Feel free to reach me out right away!

Reach directly to me at [schanate2017@student.hult.edu](mailto:schanate2017@student.hult.edu) with a [\[\(cohort\\_name\)\] STT Setup Help](#) in the subject line.

... and remember, always use dark theme! Have fun!

