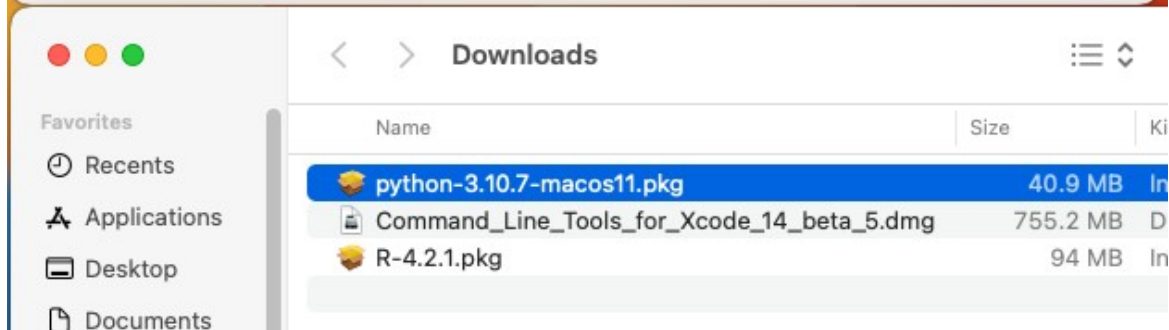
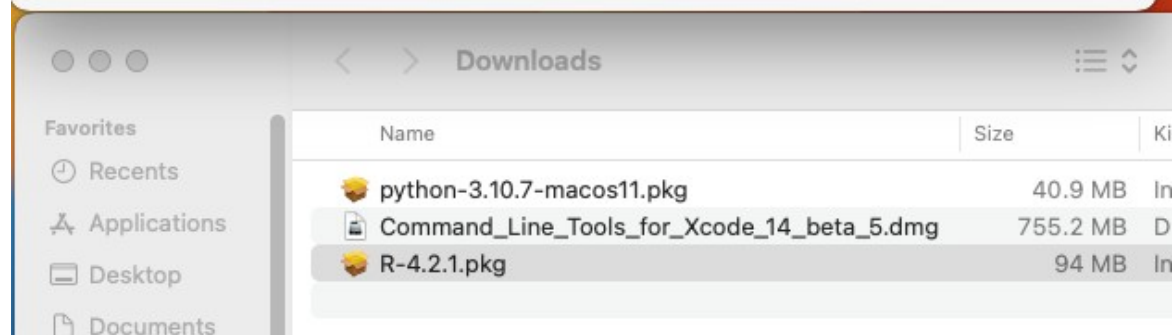
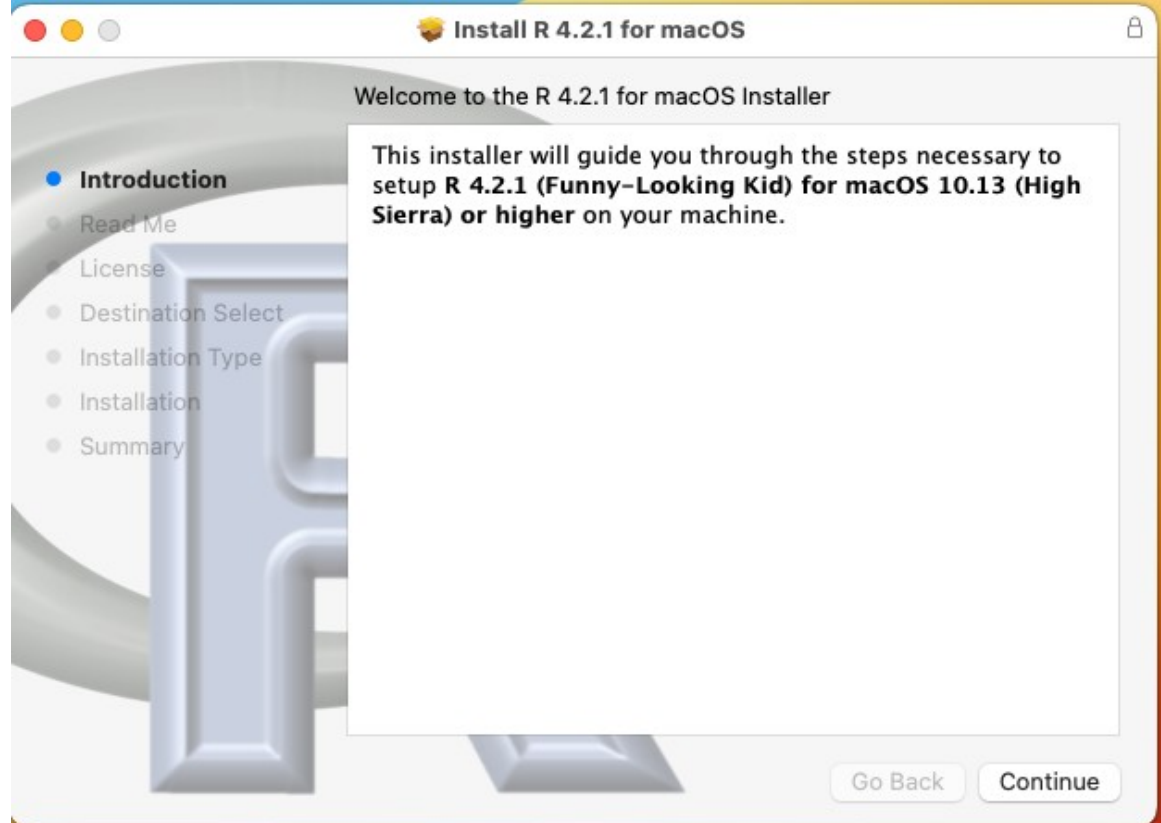
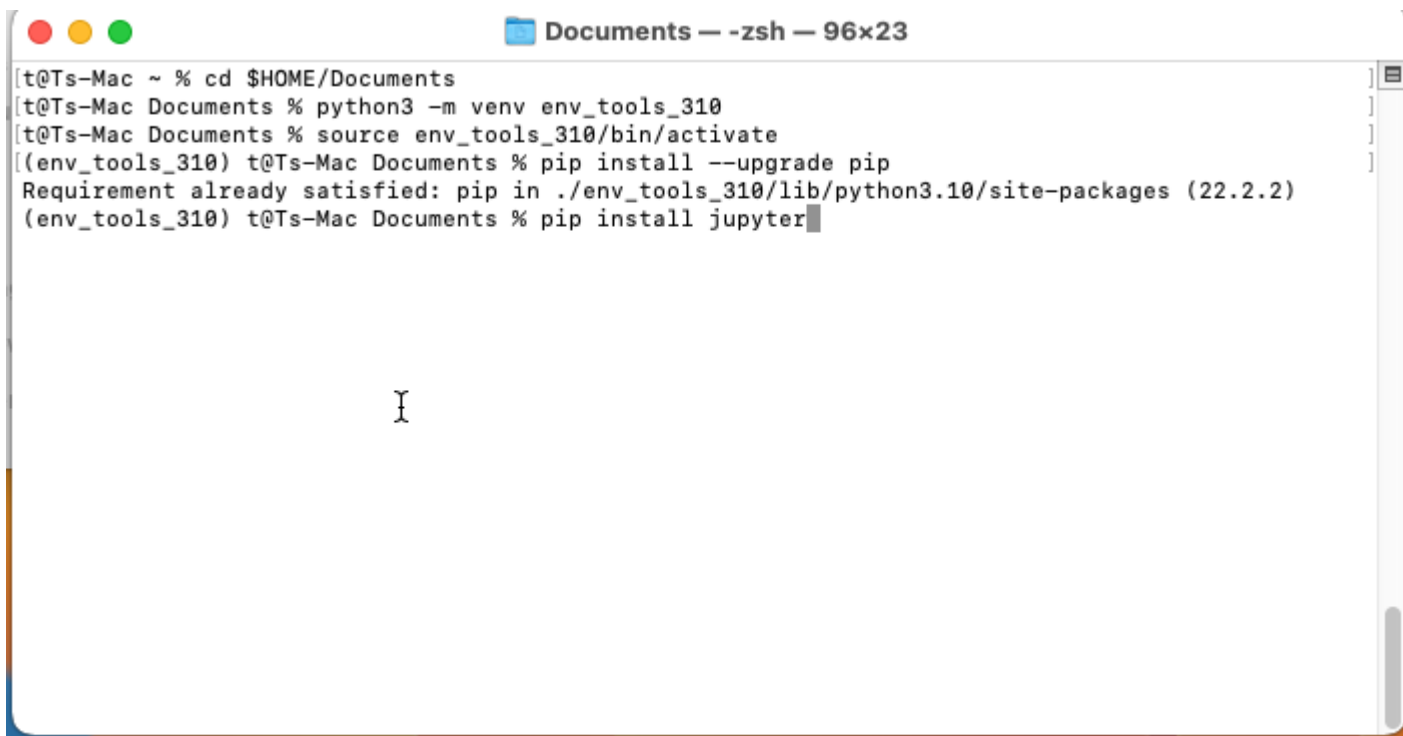


PS5841-Data Science in Insurance (Y. Wang)

MacOS Setup







```
[t@Ts-Mac ~ % cd $HOME/Documents  
[t@Ts-Mac Documents % python3 -m venv env_tools_310  
[t@Ts-Mac Documents % source env_tools_310/bin/activate  
[(env_tools_310) t@Ts-Mac Documents % pip install --upgrade pip  
Requirement already satisfied: pip in ./env_tools_310/lib/python3.10/site-packages (22.2.2)  
(env_tools_310) t@Ts-Mac Documents % pip install jupyter
```



```
er, psutil, prompt-toolkit, prometheus-client, pexpect, parso, pandocfilters, nest-asyncio, markupsafe, lxml, jupyterlab-widgets, jupyterlab-pygments, entrypoints, defusedxml, decorator, debugpy, attrs, terminado, python-dateutil, packaging, matplotlib-inline, jupyter-core, jsonschema, Jinja2, jedi, cffi, bleach, BeautifulSoup4, asttokens, stack-data, qtpy, nbformat, jupyter-client, argon2-cffi-bindings, nbclient, ipython, argon2-cffi, nbconvert, ipykernel, qtconsole, notebook, jupyter-console, ipywidgets, jupyter
```

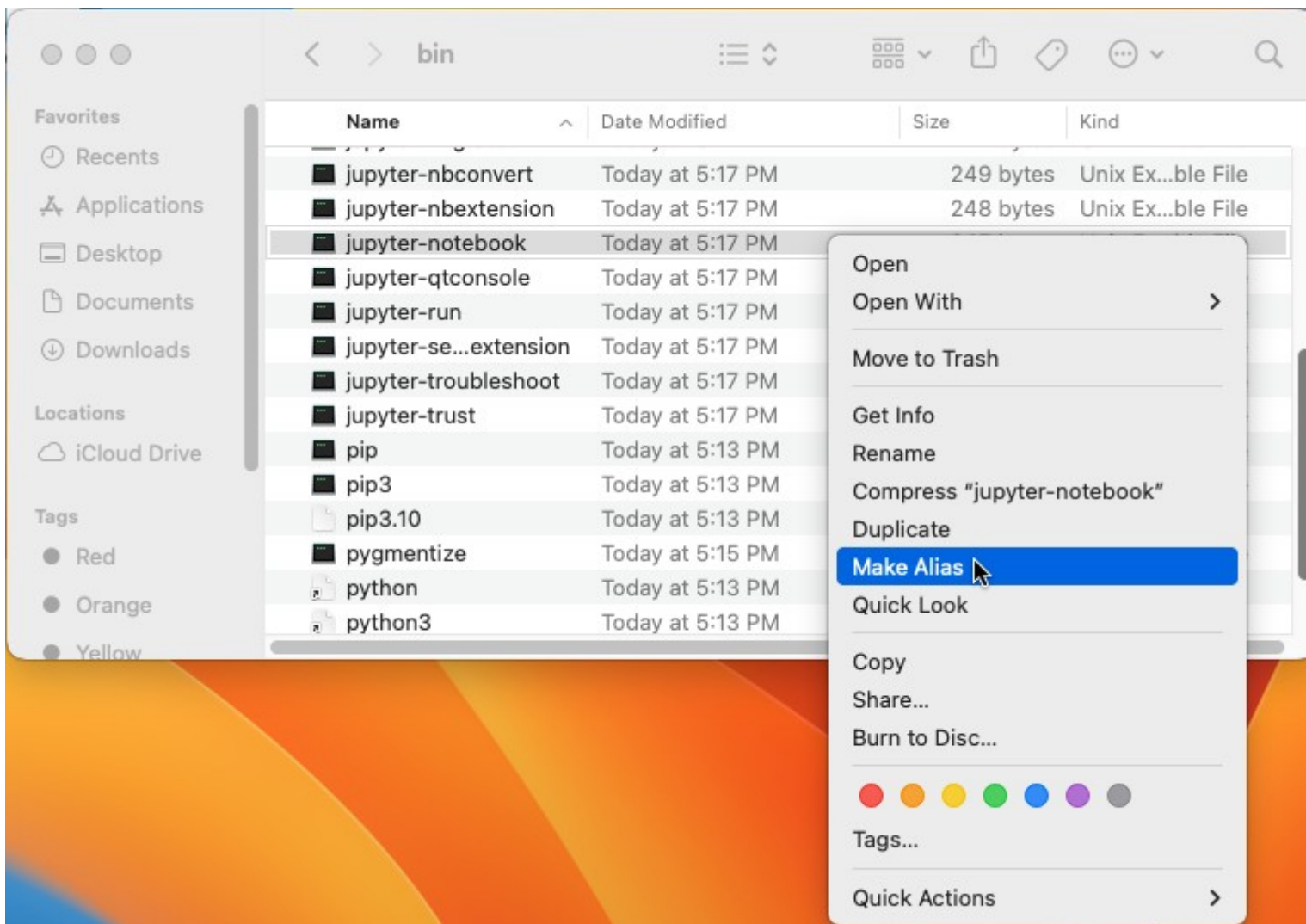
```
Running setup.py install for lxml ... -
done
```

```
Successfully installed Send2Trash-1.8.0 appnope-0.1.3 argon2-cffi-21.3.0 argon2-cffi-bindings-21.3.0 asttokens-2.0.8 attrs-22.1.0 backcall-0.2.0 BeautifulSoup4-4.11.1 bleach-5.0.1 cffi-1.15.1 debugpy-1.6.3 decorator-5.1.1 defusedxml-0.7.1 entrypoints-0.4 executing-1.0.0 fastjsonschema-2.16.1 ipykernel-6.15.2 ipython-8.5.0 ipython-genutils-0.2.0 ipywidgets-8.0.2 jedi-0.18.1 Jinja2-3.1.2 jsonschema-4.15.0 jupyter-1.0.0 jupyter-client-7.3.5 jupyter-console-6.4.4 jupyter-core-4.11.1 jupyterlab-pygments-0.2.2 jupyterlab-widgets-3.0.3 lxml-4.9.1 markupsafe-2.1.1 matplotlib-inline-0.1.6 mistune-2.0.4 nbclient-0.6.7 nbconvert-7.0.0 nbformat-5.4.0 nest-asyncio-1.5.5 notebook-6.4.12 packaging-21.3 pandocfilters-1.5.0 parso-0.8.3 pexpect-4.8.0 pickleshare-0.7.5 prometheus-client-0.14.1 prompt-toolkit-3.0.31 psutil-5.9.2 ptyprocess-0.7.0 pure-eval-0.2.2 pyparsing-2.2.1 pygments-2.13.0 pyparsing-3.0.9 pyrsistent-0.18.1 python-dateutil-2.8.2 pyzmq-23.2.1 qtconsole-5.3.2 qtpy-2.2.0 six-1.16.0 soupsieve-2.3.2.post1 stack-data-0.5.0 terminado-0.15.0 tinycss2-1.1.1 tornado-6.2 traitlets-5.3.0 wcwidth-0.2.5 webencodings-0.5.1 widgetsnbextension-4.0.3
```

```
(env_tools_310) t@Ts-Mac Documents %
```

```
[(env_tools_310) t@Ts-Mac Documents % deactivate
```

```
t@Ts-Mac Documents %
```





jupyter-notebook
alias

Favorites

- Recents
- Applications
- Desktop
- Documents
- Downloads

Locations

iCloud Drive

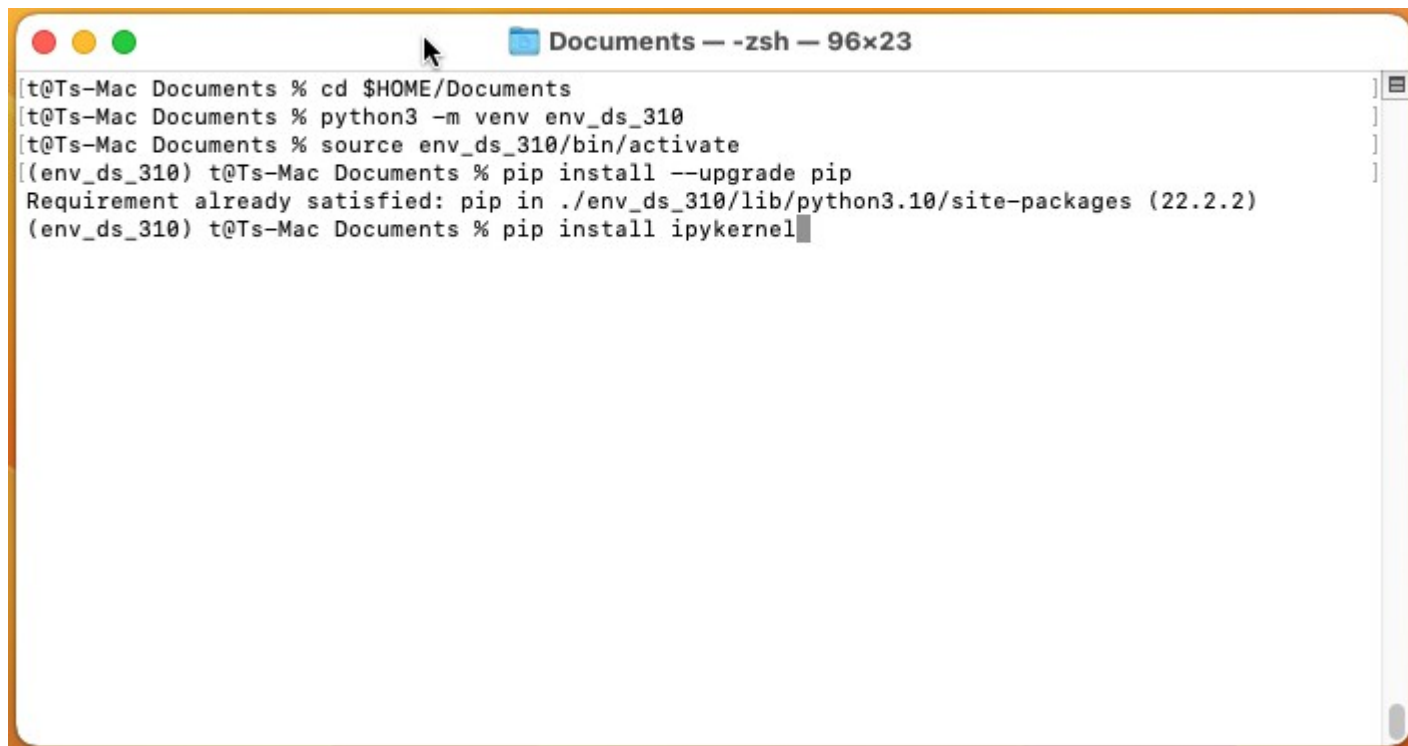
Tags

- Red
- Orange
- Yellow

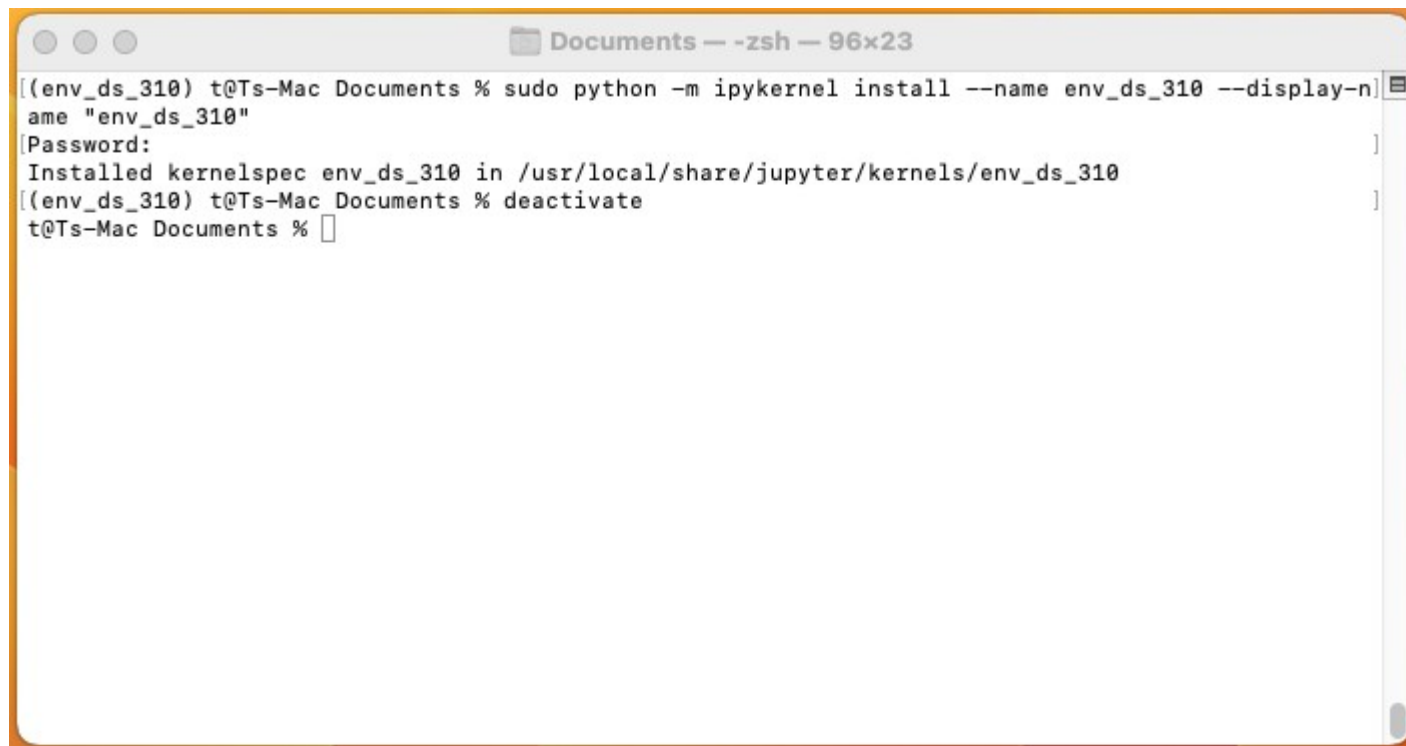
< > bin



Name	Date Modified	Size	Kind
jupyter-nbconvert	Today at 5:17 PM	249 bytes	Unix Ex...ble File
jupyter-nbextension	Today at 5:17 PM	248 bytes	Unix Ex...ble File
jupyter-notebook	Today at 5:17 PM	247 bytes	Unix Ex...ble File
jupyter-notebook alias	Today at 5:23 PM	928 bytes	Alias
jupyter-qtconsole	Today at 5:17 PM	249 bytes	Unix Ex...ble File
jupyter-run	Today at 5:17 PM	268 bytes	Unix Ex...ble File
jupyter-serverextension	Today at 5:17 PM	252 bytes	Unix Ex...ble File
jupyter-troubleshoot	Today at 5:17 PM	252 bytes	Unix Ex...ble File
jupyter-trust	Today at 5:17 PM	280 bytes	Unix Ex...ble File
pip	Today at 5:13 PM	249 bytes	Unix Ex...ble File
pip3	Today at 5:13 PM	249 bytes	Unix Ex...ble File
pip3.10	Today at 5:13 PM	249 bytes	Document
pygmentize	Today at 5:15 PM	243 bytes	Unix Ex...ble File
python	Today at 5:13 PM	7 bytes	Alias

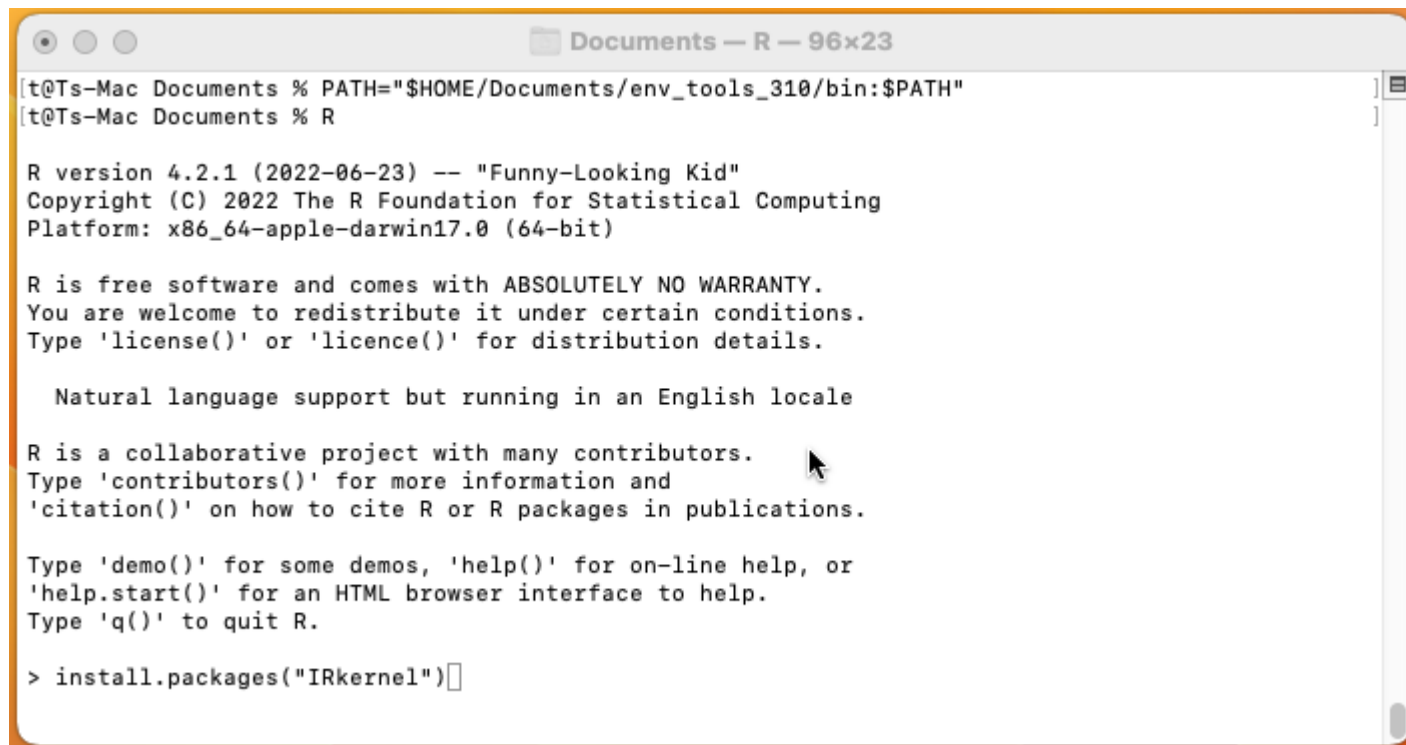


```
[t@Ts-Mac Documents % cd $HOME/Documents  
[t@Ts-Mac Documents % python3 -m venv env_ds_310  
[t@Ts-Mac Documents % source env_ds_310/bin/activate  
[(env_ds_310) t@Ts-Mac Documents % pip install --upgrade pip  
Requirement already satisfied: pip in ./env_ds_310/lib/python3.10/site-packages (22.2.2)  
(env_ds_310) t@Ts-Mac Documents % pip install ipykernel
```

A terminal window titled "Documents — -zsh — 96x23" with standard macOS window controls. The terminal shows the following sequence of commands and output:

```
[(env_ds_310) t@Ts-Mac Documents % sudo python -m ipykernel install --name env_ds_310 --display-name "env_ds_310"]
[Password: ]
Installed kernelspec env_ds_310 in /usr/local/share/jupyter/kernels/env_ds_310
[(env_ds_310) t@Ts-Mac Documents % deactivate ]
t@Ts-Mac Documents %
```



```
[t@Ts-Mac Documents % PATH="$HOME/Documents/env_tools_310/bin:$PATH"]
[t@Ts-Mac Documents % R

R version 4.2.1 (2022-06-23) -- "Funny-Looking Kid"
Copyright (C) 2022 The R Foundation for Statistical Computing
Platform: x86_64-apple-darwin17.0 (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> install.packages("IRkernel")
```

```
Documents — -zsh — 96x23

73: UK (London 1) [https]
74: USA (IA) [https]
75: USA (MI) [https]
76: USA (OH) [https]
77: USA (OR) [https]
78: USA (TN) [https]
79: USA (TX 1) [https]
80: Uruguay [https]
81: (other mirrors)

[Selection: 1
trying URL 'https://cloud.r-project.org/bin/macosx/contrib/4.2/IRkernel_1.3.tgz'
Content type 'application/x-gzip' length 222457 bytes (217 KB)
=====
downloaded 217 KB

The downloaded binary packages are in
  /var/folders/n9/_b5gjk3x241_my7fb8vcn8940000gn/T//RtmpPcZL2u/downloaded_packages
[> IRkernel::installspec()
[> q()
[Save workspace image? [y/n/c]: n
t@Ts-Mac Documents %
```



localhost



Quit

Logout

Files

Running

Clusters

Select items to perform actions on them.

Upload

New



<input type="checkbox"/> 0 ▾ /		Name ▾
<input type="checkbox"/>	Desktop	
<input type="checkbox"/>	Documents	
<input type="checkbox"/>	Downloads	
<input type="checkbox"/>	Movies	
<input type="checkbox"/>	Music	
<input type="checkbox"/>	Pictures	
<input type="checkbox"/>	Public	
<input type="checkbox"/>	Software	

Notebook:

Python 3 (ipykernel)

R

env_ds_310

Other:

Text File

Folder

Terminal

23 days ago

18 days ago

23 days ago

44 minutes ago