

Development Environment

Applications
Anaconda Navigator
Application test
Pip test
Python Review(testing app)
Finding data

Matthew Morris

Git: Morrisdata

MatthewMorris.DA@gmail.com



Applications

Terms

IDE – Integrated Development Environment

IDLE – Integrated Development Learning Environment

Developer suites

Anaconda - <https://www.anaconda.com/>

PyCharm - <https://www.jetbrains.com/pycharm/download/?section=windows>

Text editors

Sublime - <https://www.sublimetext.com/>

Notepad - <https://notepad-plus-plus.org/>

Vim - <https://www.vim.org/>

Applications – Text Editors

Organize far away from live code

Documentation

Edit functionality

Bookmarking



















Color schemes

[Sublime Exercises](#)



Anaconda Navigator

-Spyder
-Jupyter

 DataSpell 0.1 DataSpell is an IDE for exploratory data analysis and prototyping machine learning models. It combines the interactivity of Jupyter notebooks with the intelligent Python and R coding assistance of PyCharm in one user-friendly environment. Install	 Anaconda Notebooks Cloud-hosted notebook service from Anaconda. Launch a preconfigured environment with hundreds of packages and store project files with persistent cloud storage. Launch	 CMD.exe Prompt 0.1 Run a cmd.exe terminal with your current environment from Navigator activated Launch	 JupyterLab 3.6.3 An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture. Launch	 Notebook 6.5.4 Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis. Launch	 PowerShell Prompt 0.0.1 Run a PowerShell terminal with your current environment from Navigator activated Launch
 QI Python 5.4.2 PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more. Launch	 Spyder 5.4.3 Scientific Python Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features Launch	 Anaconda on AWS Graviton Running your Anaconda workloads on AWS Graviton-based processors could provide up to 40% better price performance Launch	 Datalore Kick-start your data science projects in seconds in a pre-configured environment. Enjoy coding assistance for Python, SQL, and R in Jupyter notebooks and benefit from no-code automations. Use Datalore online for free. Launch	 IBM watsonx IBM watsonx is an enterprise-ready AI platform including a data store, model builder, and AI model management and monitoring. Launch	 Oracle Cloud Infrastructure Oracle Data Science Service OCI Data Science offers a machine learning platform to build, train, manage, and deploy your machine learning models on the cloud with your favorite open-source tools Launch
 console_shortcut_miniconda 0.1.1 Launch	 Glueviz 1.2.4 Multidimensional data visualization across files. Explore relationships within and among related datasets. Launch	 Orange 3 3.34.0 Component-based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows Launch	 jowshell_shortcut_miniconda 0.0.1 Launch	 PyCharm Professional A full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL. Launch	 RStudio 1.1.456 A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks. Launch

Python Review

Review – I'm pretty new to Python

In class

- Basics of Python
- Connecting to data

Test yourself – I finished pre-work and feel pretty confident in Python

- Work on the challenge worksheets to see if you can fix the code without little reference to Cheatsheets.

Build – I have been working in python for a while but could use a refresher

- Work with the prompts in each unit to begin building a skillbuilder.

Advanced Students - I consider myself proficient in Python and don't need a refresher.

- Connect to Chipotle or your final presentation data to begin exploring data for Final

Python Review

Set your OS path where your files are stored

getcwd() What is your Current Working directory

```
import os  
os.getcwd()
```

chdir() Change your default working directory - you don't want to do this often

```
import os  
from pathlib import Path
```

```
path = Path('//Users//Matth//Documents//pythonscripts')  
os.chdir(path)
```

Make a directory

```
import os  
dirName = '/Users/Matth/Documents/pythonscripts'  
os.mkdir(dirName)
```

- 1) What is an IDE?
- 2) Name two different IDE's
- 3) What is a Library?
- 4) What is a Module?
- 5) What is a Function?
- 6) What is a Class?
- 7) What is an Object?
- 8) What is the difference between an Expression and a statement?
- 9) Why do you need pip?

Classroom Exercise

1. Connect to the titanic dataset
2. What are observations made about the data?
4. What next steps would you make?

<https://github.com/Morrisdata/data/blob/main/titanic.xls>

Tasks

Identify and obtain 1 – 3 datasets of Interest for Final Project
Connect to Chipotle data using Python
Begin creating a Python program for your ongoing learning
Explore applications

Matthew Morris

Git: Morrisdata

MatthewMorris.DA@gmail.com