

PYTHON FOR DATA SCIENCE

IMPORTING DATA

CHEAT SHEET PART- 3



Pickled Files

```
>>> import pickle
>>> with open('pickled_fruit.pkl', 'rb') as file:
pickled_data = pickle.load(file)
```

HDF5 Files

```
>>> import h5py
>>> filename = 'H-H1_LOSC_4_v1-815411200-4096.hdf5'
>>> data = h5py.File(filename, 'r')
```

Matlab Files

```
>>> import scipy.io
>>> filename = 'workspace.mat'
>>> mat = scipy.io.loadmat(filename)
```

EXPLORING DICTIONARIES

Accessing Elements with Functions

```
>>> print(mat.keys())
```

 Print dictionary keys

```
>>> for key in data.keys():print(key)
```

 Print dictionary keys

meta quality strain

```
>>> pickled_data.values()
```

 Return dictionary values

```
>>> print(mat.items())
```

 Returns items in list format of (key, value) tuple pairs

Accessing Data Items with Keys

```
>>> for key in data      Explore the HDF5 structure  
    ['meta'].keys()  
    print(key)
```

```
Description  
DescriptionURL  
Detector  
Duration  
GPSstart  
Observatory  
Type  
UTCstart
```

```
>>> print(data['meta']  Retrieve the value for a  
    ['Description'].value) key
```

NAVIGATING YOUR FILESYSTEM

Magic Commands

<code>!ls</code>	List directory contents of files and directories
<code>%cd ..</code>	Change current working directory
<code>%pwd</code>	Return the current working directory path

os Library

<code>>>> import os</code>	
<code>>>> path = "/usr/tmp"</code>	
<code>>>> wd = os.getcwd()</code>	Store the name of current directory in a string
<code>>>> os.listdir(wd)</code>	Output contents of the directory in a list
<code>>>> os.chdir(path)</code>	Change current working directory
<code>>>> os.rename("test1.txt", "test2.txt")</code>	Rename a file
<code>>>> os.remove("test1.txt")</code>	Delete an existing file
<code>>>> os.mkdir("newdir")</code>	Create a new directory

Build your career story with **1stepGrow Academy**

Follow 1stepGrow Academy

Share your Comments

Save the Post

