

Galaxy

```
#C9FD0F0BHHHIGJ3ZHI#0:70PFGGGG
#HNT-571363:155:01090ACKK:2:1101:354
ATACGCTGAGACACAGACAGAGGCCCCACGCTC
+
CCCCFFFFHHHHHJJJJJJJJJJJJJJJJJJJJJJ
#HNT-571363:155:01090ACKK:2:1101:371
CCAAAGATTAAATTAACATATGCCCCCTTGGTG
+
38#FF0FB7H7H0FIEFIEGHEIHH0G:PBCHIJC
#HNT-571363:155:01090ACKK:2:1101:354
GGCTTGGGAGAGAGAGACATCTTGGCTTGGG
GGATPCCCTGCTCTCAGGCTCTCTGAGTAGCTCTG
+
```

57: Tabular Data

ipython.notebook

calls

ipython.mako

generate Key File
handle IPython - Notebook
run Docker Container

authenticate with Password
load ipython_galaxy_notebook.ipynb

copy

copy

calls

Docker Container

ipython + scipy stack installed

config.yaml

History_ID
API_Key
Password

ipython_galaxy_notebook.ipynb

start Webservice

IPython Webservice

check if Service still needed

Galaxy

IPiVi: Notebook

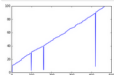
ipython_galaxy_notebook

Welcome to the interactive Galaxy IPython Notebook.

You can access your data via the dataset number. For example, `handle = get(42)` in the same data, write your data to a file, and then call `plt.figure()` to show the data. This dataset will then be available in your galaxy history in the same way as your notebook in galaxy, click the large green button at the top right of the IPython interface

```
In [2]: import numpy as np
import matplotlib.pyplot as plt

In [4]: data = np.loadtxt('get001', delimiter='|', skiprows=1, usecols=(1))
plt.plot(values)
plt.savefig('fig001.png')
plt.show()
```



```
In [3]: import csv

values = []
with open('get001') as handle:
    for row in csv.DictReader(handle, delimiter='|', quotechar='"', quoting=QUOTE_MINIMAL):
        if row['type'] == 'x':
            values.append(row['value'])

values.sort()
plt.plot(values)
plt.savefig('fig001.png')
plt.show()
```

57: Tab. Data

ipython.nb