This produces the following output:

	Age	Location	Name
0	24	New York	John
1	13	Paris	Anna
2	53	Berlin	Peter
3	33	London	Linda

There are several possible ways to query this table. For example:

In[8]:

```
# Select all rows that have an age column greater than 30
display(data_pandas[data_pandas.Age > 30])
```

This produces the following result:

	Age	Location	Name
2	53	Berlin	Peter
3	33	London	Linda

mglearn

This book comes with accompanying code, which you can find on GitHub. The accompanying code includes not only all the examples shown in this book, but also the mglearn library. This is a library of utility functions we wrote for this book, so that we don't clutter up our code listings with details of plotting and data loading. If you're interested, you can look up all the functions in the repository, but the details of the mglearn module are not really important to the material in this book. If you see a call to mglearn in the code, it is usually a way to make a pretty picture quickly, or to get our hands on some interesting data.



Throughout the book we make ample use of NumPy, matplotlib and pandas. All the code will assume the following imports:

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
import malearn
```

We also assume that you will run the code in a Jupyter Notebook with the %matplotlib notebook or %matplotlib inline magic enabled to show plots. If you are not using the notebook or these magic commands, you will have to call plt.show to actually show any of the figures.

Python 2 Versus Python 3

There are two major versions of Python that are widely used at the moment: Python 2 (more precisely, 2.7) and Python 3 (with the latest release being 3.5 at the time of writing). This sometimes leads to some confusion. Python 2 is no longer actively developed, but because Python 3 contains major changes, Python 2 code usually does not run on Python 3. If you are new to Python, or are starting a new project from scratch, we highly recommend using the latest version of Python 3 without changes. If you have a large codebase that you rely on that is written for Python 2, you are excused from upgrading for now. However, you should try to migrate to Python 3 as soon as possible. When writing any new code, it is for the most part quite easy to write code that runs under Python 2 and Python 3.2 If you don't have to interface with legacy software, you should definitely use Python 3. All the code in this book is written in a way that works for both versions. However, the exact output might differ slightly under Python 2.

Versions Used in this Book

We are using the following versions of the previously mentioned libraries in this book:

In[9]:

```
import sys
print("Python version: {}".format(sys.version))
import pandas as pd
print("pandas version: {}".format(pd.__version__))
import matplotlib
print("matplotlib version: {}".format(matplotlib.__version__))
import numpy as np
print("NumPy version: {}".format(np.__version__))
import scipy as sp
print("SciPy version: {}".format(sp. version ))
import IPython
print("IPython version: {}".format(IPython.__version__))
import sklearn
print("scikit-learn version: {}".format(sklearn.__version__))
```

² The six package can be very handy for that.