

```

1 import pandas as pd
2
3
4 def test_run():
5     """Function called by Test Run."""
6     df = pd.read_csv("data/AAPL.csv")
7     print df.head()
8
9
10 if __name__ == "__main__":
11     test_run()

```

Listing 1: Python example

Read and Slicing data

```

1 # Reading in a CSV file
2 # You can read in the contents of a CSV (comma-separated values)
   file into a Pandas dataframe using:
3 df = pd.read_csv(<filename>)
4
5 # Selecting rows from a dataframe:
6 First 5 rows: df.head()
7 Last 5 rows: df.tail()
8
9 # Similarly, last n rows:
10 df.tail(n)
11
12 # Reading Rows
13 # from row 10 to 20:
14 df[10:21]

```

Listing 2: Python example

Return the statistics

```

1 # calculate the maximum
2
3 """Compute max price"""
4
5 import pandas as pd
6
7 def get_max_close(symbol):
8     """Return the max closing value for stock indicated by symbol.
9
10    Note: Data for a stock is stored in file: data/<symbol>.csv
11    """
12    df = pd.read_csv("data/{ }.csv".format(symbol)) # read in data
13    return df['close'].max()
14    # return df['Volume'].mean()
15
16
17 def test_run():
18     """Function called by Test Run."""
19     for symbol in ['AAPL', 'IBM']:
20         print "Max close"
21         print symbol, get_max_close(symbol)
22
23

```

```

24 if __name__ == "__main__":
25     test_run()

```

Listing 3: Python example

```

# Plot data
1 """Plot High prices for IBM"""
2
3 import pandas as pd
4 import matplotlib.pyplot as plt
5
6 def test_run():
7     df = pd.read_csv("data/IBM.csv")
8     df['High'].plot()
9     # df['Adj Close'].plot()
10    plt.show() # must be called to show plots
11
12 if __name__ == "__main__":
13     test_run()

```

Listing 4: Python example

```

# Plot two columns
1 df[['Adj Close', 'High']].plot()

```

Listing 5: Python example

Listing 6: Python example

Listing 7: Python example

Listing 8: Python example

Listing 9: Python example

Listing 10: Python example

Listing 11: Python example

Listing 12: Python example

Listing 13: Python example

Listing 14: Python example

Listing 15: Python example

Listing 16: Python example

Listing 17: Python example

Listing 18: Python example

Listing 19: Python example

Listing 20: Python example

Listing 21: Python example

Listing 22: Python example

Listing 23: Python example

Listing 24: Python example

Listing 25: Python example

Listing 26: Python example

Listing 27: Python example

Listing 28: Python example

Listing 29: Python example

Listing 30: Python example