# Python package - quandl



https://docs.quandl.com/docs/python

A project containing the source code and many more usage examples related to Python's quandl package

Get millions of financial and economic datasets from hundreds of publishers directly into Python.

## **Python version**

Python 2.7.14 :: Anaconda custom (64-bit)

## **Compatibility**

This package is compatible with Python v2.7.x and v3.x+.

#### Installation

pip install quandl

#### **Authentication**

The Quandl Python module is free but you must have a Quandl API key in order to download data. To get your own API key, you will need to create a free Quandl account and set your API key.

Finally you can visit <a href="https://www.quandl.com/account/api">https://www.quandl.com/account/api</a> and check/copy your API to access Quandl's API.

## **Setting API Key**

#### conf.py

```
# API KEY for QUANDL (Use your own API KEY)
API_KEY = '2eVS3E8J_1DUFKbnF6gW';

main.py

import quandl
import conf

# Setting Quandl's API KEY
quandl.ApiConfig.api_key = conf.API_KEY
```

## Run code (main.py)

## 1. TIME-SERIES (Using time-series based APIs)

#### WTI Crude Oil Price

Quandl code » EIA/PET\_RWTC\_D

From » US Department of Energy

main.py

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# WTI Crude Oil Price (https://www.quandl.com/EIA/PET_RWTC_D)
# Quandl code: EIA/PET_RWTC_D
# From: US Department of Energy (https://www.quandl.com/EIA)
data = quandl.get("EIA/PET_RWTC_D");
print data;
```

## Run code (main.py)

#### 2. CHANGING FORMAT

Getting the data obtained as Numpy array

```
main_data_as_numpy_array.py
```

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# WTI Crude Oil Price (https://www.quandl.com/EIA/PET_RWTC_D)
# Quandl code: EIA/PET_RWTC_D
# From: US Department of Energy (https://www.quandl.com/EIA)
data = quandl.get("EIA/PET_RWTC_D", returns="numpy");
print data; # data is Numpy array
```

## Run code (main\_data\_as\_numpy\_array.py)

```
python main_data_as_numpy_array.py
```

#### 3. Make a filtered time-series call

```
main_data_filtered_set_start_and_end_dates.py
```

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# Quandl code: FRED/GDP
data = quandl.get("FRED/GDP", start_date="2001-12-31", end_date="2005-12-31");
print data;
```

## Run code (main\_data\_filtered\_set\_start\_and\_end\_dates.py)

```
python main_data_filtered_set_start_and_end_dates.py
```

## 4. Request specific columns

```
main_data_filtered_request_specific_columns.py

"""
import quandl
import conf
```

```
# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# Requesting specific columns
# Quandl codes: "NSE/OIL.1", "WIKI/AAPL.4"
data = quandl.get(["NSE/OIL.1", "WIKI/AAPL.4"])
print data;
```

## Run code (main\_data\_filtered\_request\_specific\_columns.py)

python main\_data\_filtered\_request\_specific\_columns.py

## 5. Request 5 rows

```
main_data_filtered_request_5_rows.py
```

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# Requesting 5 rows
# Quandl codes: WIKI/AAPL
```

```
data = quandl.get("WIKI/AAPL", rows=5)
print data;
```

## Run code (main\_data\_filtered\_request\_5\_rows.py)

```
python main_data_filtered_request_5_rows.py
```

### 6. Preprocessing data: Changing sampling frequency

```
main_data_preprocessing_change_sampling_frequency.py
```

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# Preprocessing data, Changing sampling frequency
# Quandl code: EIA/PET_RWTC_D
data = quandl.get("EIA/PET_RWTC_D", collapse="monthly")
print data;
```

## Run code (main\_data\_preprocessing\_change\_sampling\_frequency.py)

## 7. Perform elementary calculations

main\_data\_preprocessing\_perform\_elementary\_calculations.py

```
import quandl
import conf

# Setting Quandl's API KEY (Use your own API KEY)
quandl.ApiConfig.api_key = conf.API_KEY

# Preprocessing data
# Perform elementary calculations on data
# Quandl code: FRED/GDP
data = quandl.get("FRED/GDP", transformation="rdiff")
print data;
```

## Run code (main\_data\_preprocessing\_perform\_elementary\_calculations.py)

python main\_data\_preprocessing\_perform\_elementary\_calculations.py

