Python package - quandl

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Introduction

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 https://www.quandl.com/account/api 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_lDUFKbnF6gW';
> ```

> `main.py`
>
> ```
> import quandl
> import conf
>
> # Setting Quandl's API KEY
> quandl.ApiConfig.api_key = conf.API_KEY
> ```

Run code (main.py)

python 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)

python 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)

python 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

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Thanks,
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