**Assignment 02: Evaluate the FDNY Dataset**[**¶**](http://localhost:8889/notebooks/3_Practice_Project/Course_5_Data%20Science%20with%20Python/Practice_projects/Lesson%207.13_practice%20project/Assignment_02/Pandas%20-%20Assignment%2002.ipynb#Assignment-02:-Evaluate-the-FDNY-Dataset)

## Analyze New York city fire department Dataset

**DESCRIPTION**

**What to:**

A dataset in CSV format is given for the Fire Department of New York City. Analyze the dataset to determine:

1. The total number of fire department facilities in New York city
2. The number of fire department facilities in each borough
3. The facility names in Manhattan

**Assessment:**

Note: For code, refer the attached Notebook in PDF format.

#### 1: View and import the dataset

* Imported the Pandas library.
* Using read\_csv(), Imported the Fire Department of New York City (FDNY.csv) file.
* The Dataset is named as ‘df\_FDNY\_Dataset’.

#### 2: Analyze the dataset

* Using describe method, the entire content of the dataset is viewed.
* Using df\_FDNY\_Dataset.head(), returns the first five records in dataset.
* The result of head(), shows the dataset contains duplicate header row.
* The duplicate header row is removed using pd.read\_csv(‘filepath..\\FDNY.csv',skiprows=1)
* Using head(), the dataset is verified again.
* To view the data statistics of fixed dataset, describe() function is used as df\_FDNY\_Dataset.describe().
* Using Column method as ‘df\_FDNY\_Dataset.columns’ the attributes/column of the dataset is obtained.
* To View the index of the dataset, df\_FDNY\_Dataset.index, which returns

RangeIndex(start=0, stop=218, step=1).

#### 3: Find the total number of fire department facilities in New York City.

* Using df\_FDNY\_Dataset.count() the total number of fire department facilities in New York City is obtained.
* FacilityName 218
* FacilityAddress 218
* Borough 218
* df\_FDNY\_Dataset.dtypes, returns the data types of all three attributes as object.

#### 4: Find the total number of fire department facilities in each borough

* Using groupby(), the FDNY information selected as boroughwise
* size() is used to view FDNY information for each borough
* Borough
* Bronx 34
* Brooklyn 66
* Manhattan 48
* Queens 50
* Staten Island 20

#### 5: Find the total number of fire department facilities in Manhattan

* The FDNY information selected for Manhattan using ‘get\_group()’ function.
* FDNY\_info\_Manhattan, lists the total number of Fire Department facilities in Manhattan.
* There are 48 Fire Department facilities in available Manhattan.