**Assignment 4 – Multi Indexing Grouping and Aggregations**

1. Write script to answer following

Dataset - <http://bit.ly/smallstocks>

* **set index on ‘Symbol‘ and 'Date‘, allow inplace changes**
* **sort indexes**
* **Select data for “AAPL”**
* **Select “Close” value for “AAPL” on “2016-10-03”**
* **Select data for Apple and Microsoft**
* **Select data for Apple and Microsoft for a particular Date**
* **Select data for apple on multiple dates**
* **Selecting all data for '2016-10-03','2016-10-04‘date**
* **Fetch all those rows where Volume>18000000**

1. **Grouping and Aggregations**

Dataset - <https://raw.githubusercontent.com/datagy/data/main/sales.csv>

* Load data and group by Region
* counting number of groups
* Accessing the Groups in a GroupBy object
* Accessing only Group Names of a GroupBy Object
* Selecting a Group of south region
* Findout average Sales per region
* Applying Multiple Aggregations Using Pandas GroupBy - Find out Mean, median and variance of sales per region
* Calculate percentage of region's sales per row with respect to total sale of the region
* Filtering Rows Where the Group's Average Sale Price is Less Than 20,000
* calculate the sum of all sales broken out by 'region' and by 'gender'
* Ranking Sales by Region and by Gender

