Comcast Telecom Consumer   Complaints

Problem Statement :

Comcast is an American global telecommunication company. The firm has been providing terrible customer service. They continue to fall short despite repeated promises to improve. Only last month (October 2016) the authority fined them a $2.3 million, after receiving over 1000 consumer complaints.
The existing database will serve as a repository of public customer complaints filed against Comcast.
It will help to pin down what is wrong with Comcast's customer service.

Objectives :

To perform these tasks, you can use any of the different Python libraries such as NumPy, SciPy, Pandas, scikit-learn, matplotlib, and Beautiful Soup.

Prerequisites :

- Basics of Python
- Application of Python libraries in data science
- Perform analysis on a dataset
- Knowledge of Data Frame
- Train and perform prediction on a dataset

Discerption:

- **Ticket #: Ticket number assigned to each complaint**
- **Customer Complaint: Description of complaint**
- **Date: Date of complaint**
- **Time: Time of complaint**
- **Received Via: Mode of communication of the complaint**
- **City: Customer city**
- **State: Customer state**
- **Zipcode: Customer zip**
- **Status: Status of complaint**
- **Filing on behalf of someone**
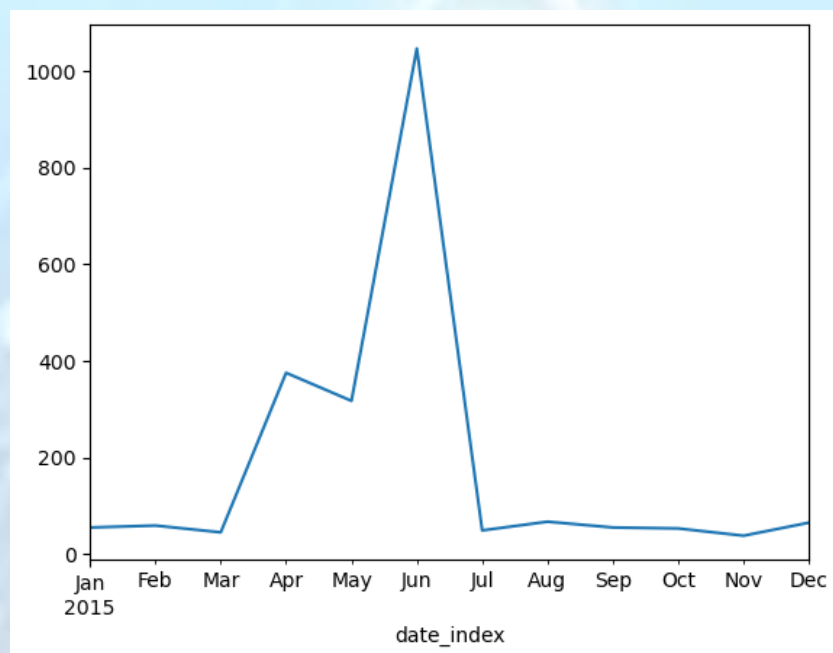
ANALYSIS:

Understand the dataset:,

Head of the data set

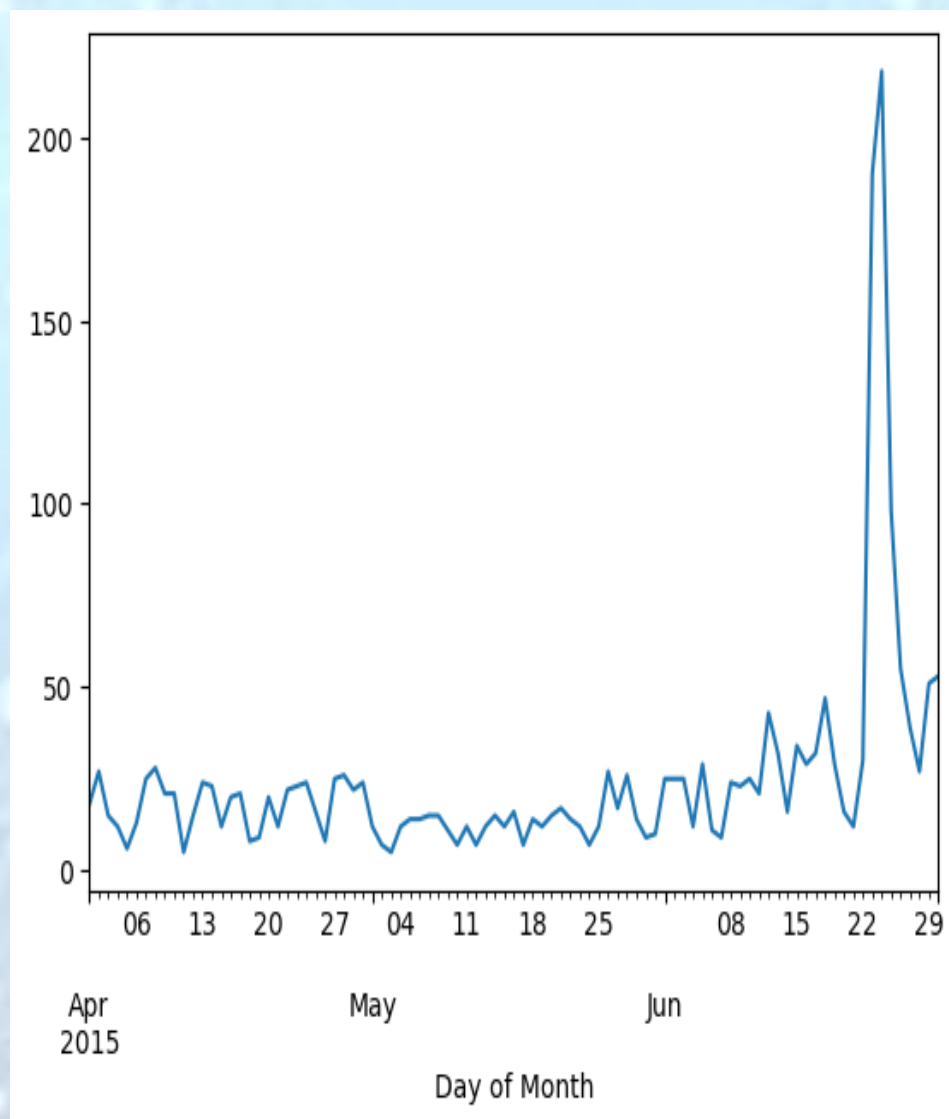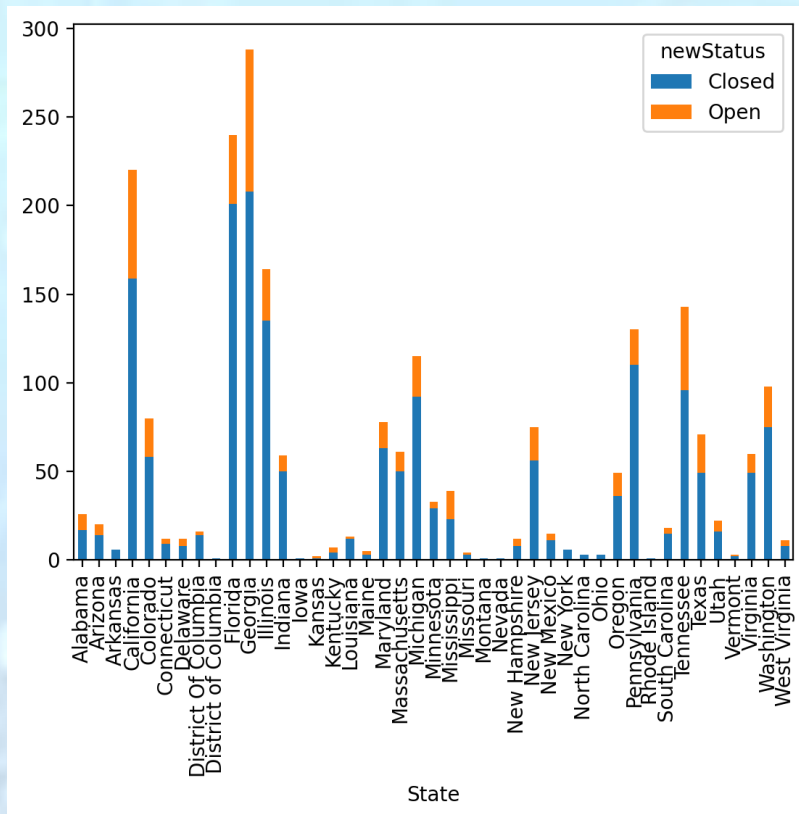|	Ticket #	Customer Complaint	Date	Date_month_year	Time	Received Via	City	State	Zip code	Status	Filing on Behalf of Someone
0	250635	Comcast Cable Internet Speeds	22-04-15	22-Apr-15	3:53:50 PM	Customer Care Call	Abingdon	Maryland	21009	Closed	No
1	223441	Payment disappear - service got disconnected	04-08-15	04-Aug-15	10:22:56 AM	Internet	Acworth	Georgia	30102	Closed	No
2	242732	Speed and Service	18-04-15	18-Apr-15	9:55:47 AM	Internet	Acworth	Georgia	30101	Closed	Yes
3	277946	Comcast Imposed a New Usage Cap of 300GB that ...	05-07-15	05-Jul-15	11:59:35 AM	Internet	Acworth	Georgia	30101	Open	Yes
4	307175	Comcast not working and no service to boot	26-05-15	26-May-15	1:25:26 PM	Internet	Acworth	Georgia	30101	Solved	No

Basic data exploratory analysis:

Trend chart for the number of complaints at monthly granularity levels

Trend chart for the number of complaints at daily granularity levels
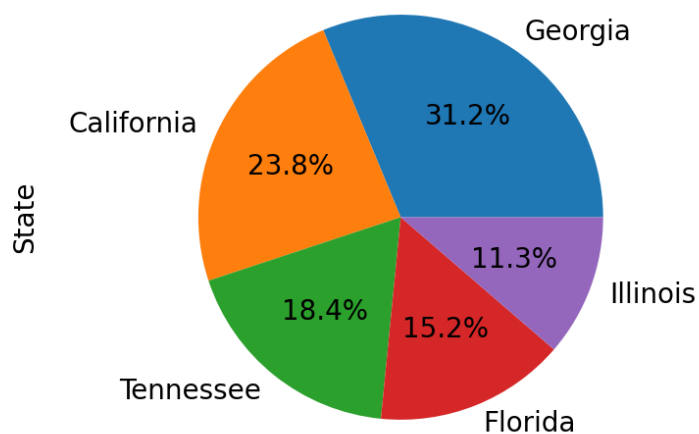

Day of Month

Create a new categorical variable with value as Open and Closed.

Unresolved Complaints Distribution Across the State

Unresolved complaints distribution across State

Provide the percentage of the complaints resolved till date, which were received through the Internet and customer care calls
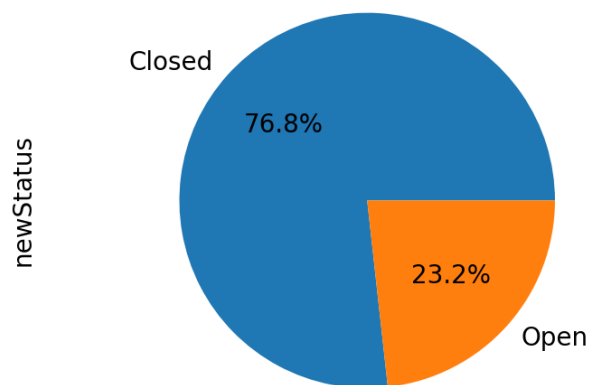
Head of the data set

Day of Month	Ticket #	Customer Complaint	Date	Date_month_year	Time	Received Via	City	State	Zip code	Status	Filing on Behalf of Someone	date_index	Day of Month	newStatus
2015-04-22	250635	Comcast Cable Internet Speeds	22-04-15	2015-04-22	3:53:50 PM	Customer Care Call	Abingdon	Maryland	21009	Closed	No	2015-04-22 15:53:50	2015-04-22	Closed
2015-04-08	223441	Payment disappear - service got disconnected	04-08-15	2015-08-04	10:22:56 AM	Internet	Acworth	Georgia	30102	Closed	No	2015-08-04 10:22:56	2015-04-08	Closed
2015-04-18	242732	Speed and Service	18-04-15	2015-04-18	9:55:47 AM	Internet	Acworth	Georgia	30101	Closed	Yes	2015-04-18 09:55:47	2015-04-18	Closed
2015-05-07	277946	Comcast Imposed a New Usage Cap of 300GB that ...	05-07-15	2015-07-05	11:59:35 AM	Internet	Acworth	Georgia	30101	Open	Yes	2015-07-05 11:59:35	2015-05-07	Open
2015-05-26	307175	Comcast not working and no service to boot	26-05-15	2015-05-26	1:25:26 PM	Internet	Acworth	Georgia	30101	Solved	No	2015-05-26 13:25:26	2015-05-26	Closed

Complaint status through internet and customer care

complaints Status through Internet & Customer Care

The dataset contains the information about the Comcast Telecom Consumer Complaints.

OBSERVATION OF THE DATA SET :

- **According to the trend chart for complaint at monthly granularity level:**
    1. **From the month of January to February the complaint level is constant**
    2. **From February to March there is slightly decrease**
    3. **From the March to April the complaint grows slightly and shrink in the month of May**
    4. **During the May to June the level of complaint enormously increased , but sudden decrease in the month of July**
    5. **Further there is no much difference the level of complaint till the December .**
- **According to the trend chart for the number of complaint at daily granularity level**
    1. **In the month of April there is slightly scaling ups and down in the complaint level**
    2. **In the month of May beginning there is no much difference in the complaint level but in the end of the month there is slightly scaling ups and down in the complaint level**
    3. **Beginning of the June month there is slightly scaling ups and down in the complaint level but from 20 to 26 there is enormous increase in the complaint level and from 27 onwards there is decrease in the complaint level and from 29 there constant scaling ups and down in the complaint level**

- **Comcast as the maximum frequency of complaint and Comcast issue as the minimum**
- **Georgia as the highest closed complaint and highest open complaint of 208 and 80**
- **Compare to other state Georgia as the highest unresolved complaints of 31.2%**
- **Complaint status compare to internet and customer care , the internet as the highest of 76.8% and customer care as the 31.2%.**

THANK YOU