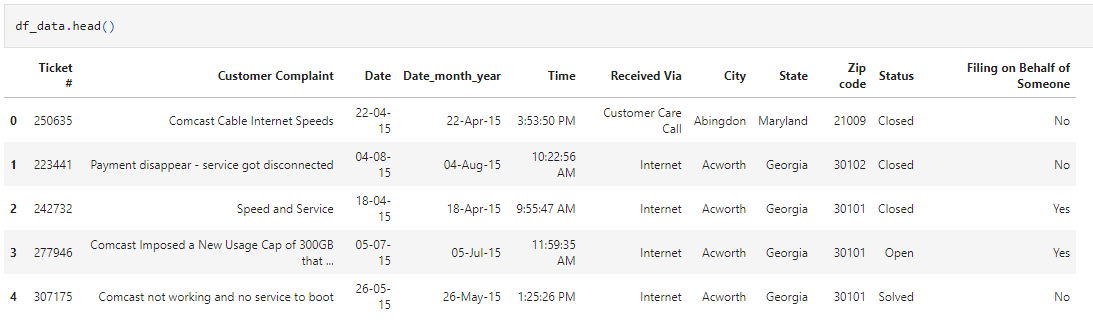
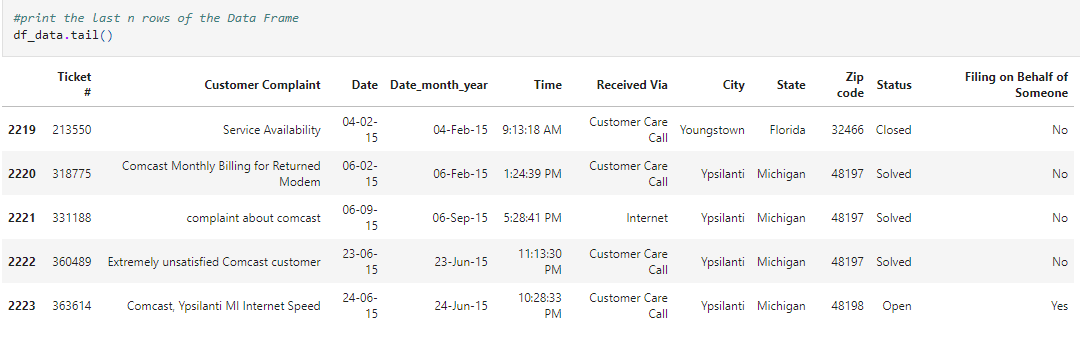
**Code and Plot Screenshots**

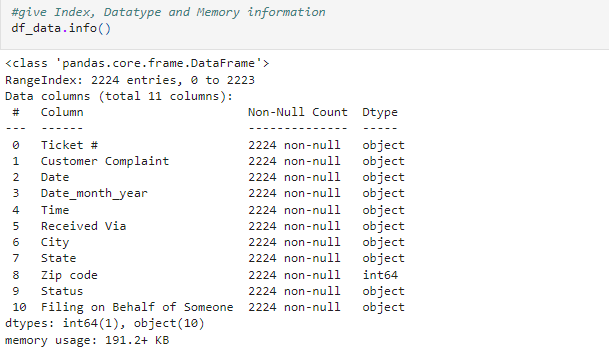
* df\_data**.**head()



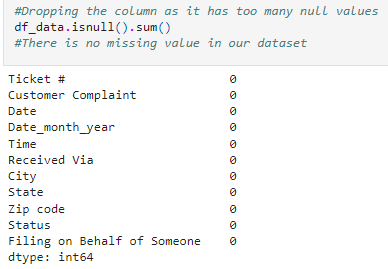
* df\_data**.**tail()



* df\_data**.**info()



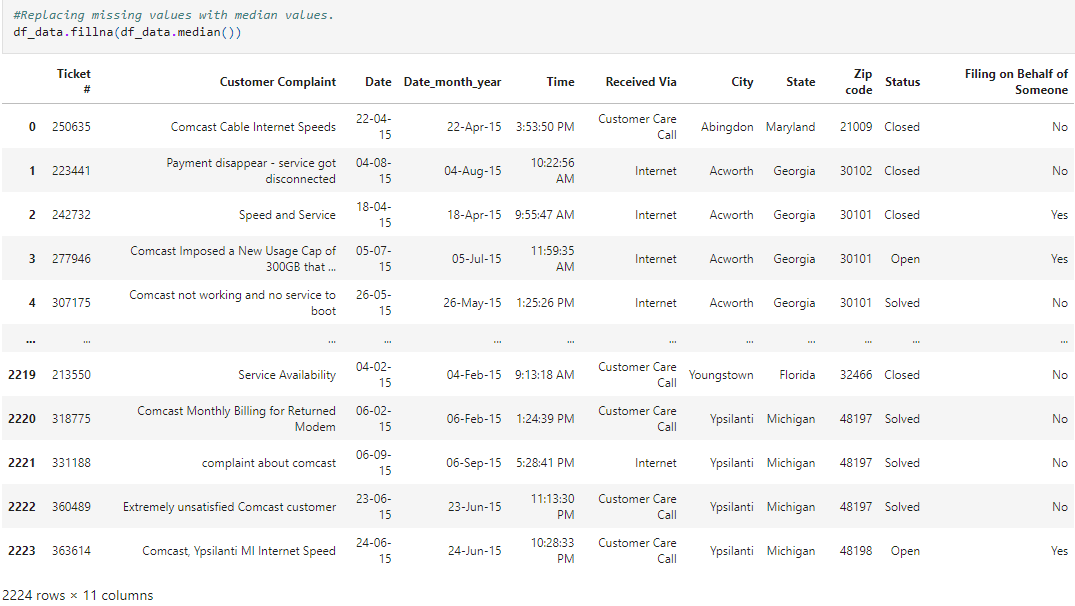
* df\_data**.**isnull()**.**sum()



* df\_data**.**fillna(df\_data**.**median())

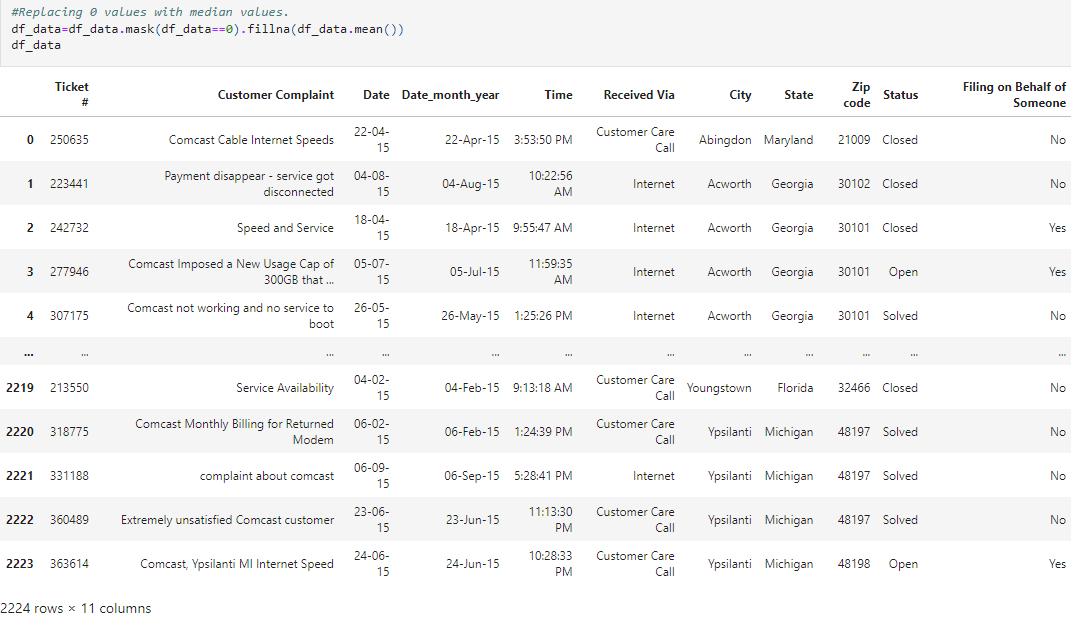


* df\_data**.**fillna(df\_data**.**median())

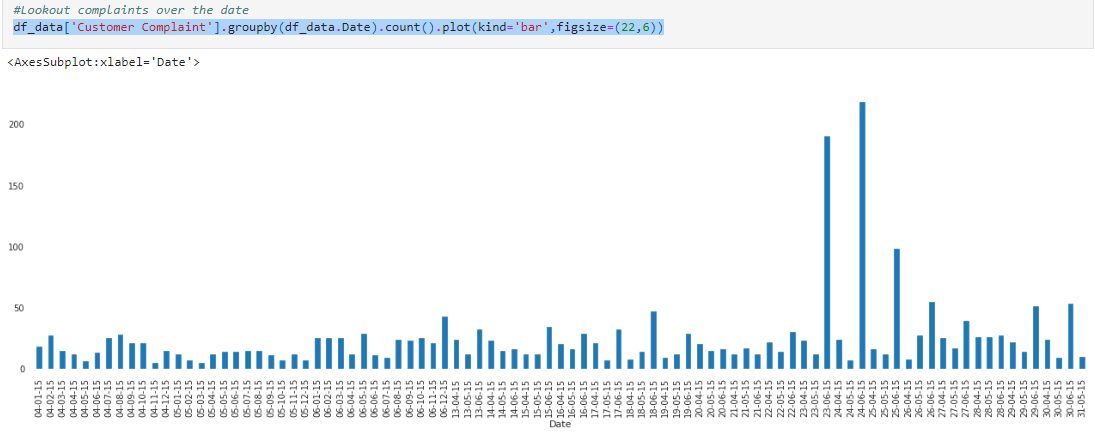


* df\_data**=**df\_data**.**mask(df\_data**==**0)**.**fillna(df\_data**.**mean())

df\_data



* df\_data['Customer Complaint']**.**groupby(df\_data**.**Date)**.**count()**.**plot(kind**=**'bar',figsize**=**(22,6))



* **from** datetime **import** datetime **as** dt

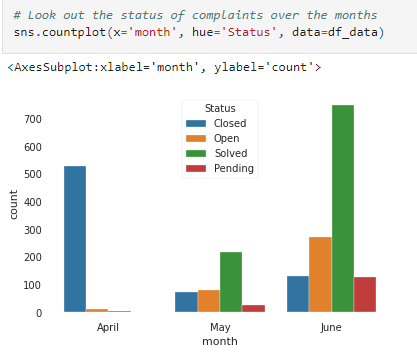
df\_data['month'] **=** pd**.**DatetimeIndex(df\_data['Date'])**.**month

df\_data['month']**=**df\_data['month']**.**replace([1,2,3,4,5,6,7,8,9,10,11,12],['Jan','Feb','March','April','May','June','July','Aug','Sep','Oct','Nov','Dec'])

df\_data['month']**.**value\_counts()**.**plot(kind**=**'bar',color**=**'grey')

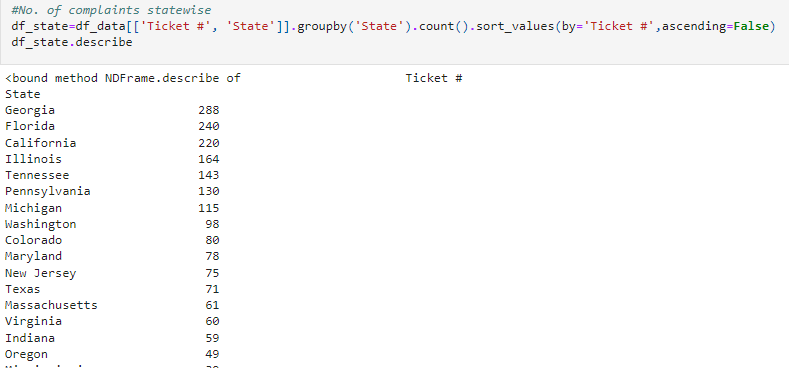


* sns**.**countplot(x**=**'month', hue**=**'Status', data**=**df\_data)

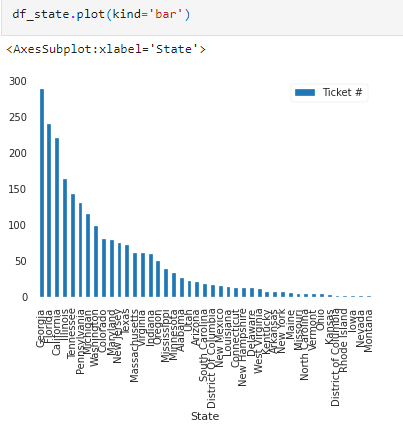


* df\_state**=**df\_data[['Ticket #', 'State']]**.**groupby('State')**.**count()**.**sort\_values(by**=**'Ticket #',ascending**=False**)

df\_state**.**describe



* df\_state**.**plot(kind**=**'bar')



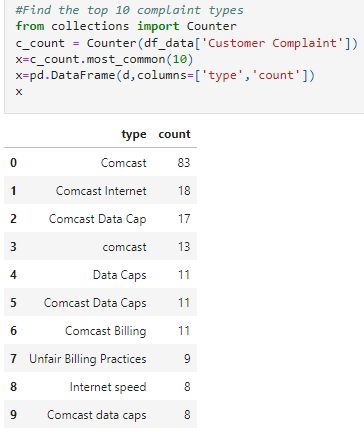
* **from** collections **import** Counter

c\_count **=** Counter(df\_data['Customer Complaint'])

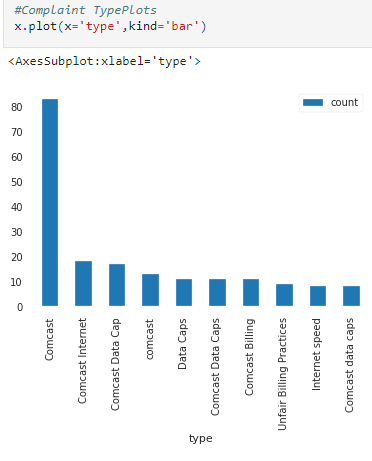
x**=**c\_count**.**most\_common(10)

x**=**pd**.**DataFrame(d,columns**=**['type','count'])

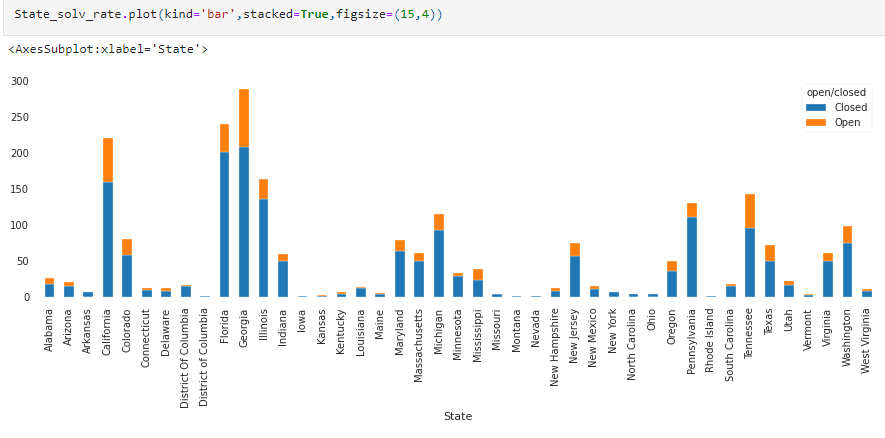
x



* x**.**plot(x**=**'type',kind**=**'bar')



* State\_solv\_rate**.**plot(kind**=**'bar',stacked**=True**,figsize**=**(15,4))



* *#% of complaints resolved till date*

