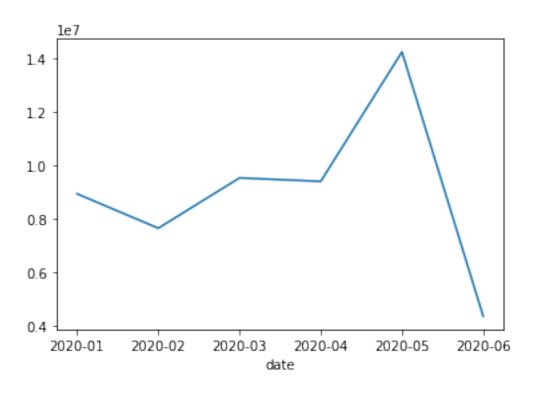
7v81 exercise1

June 10, 2020

```
[9]: import pandas as pd
     df= pd.read_csv('realdt.csv')
     print (df)
     df['date']=pd.to_datetime(df['date'])
                          date
                                        username
                                                                 replies
                                                                           retweets
                                                             to
    0
          2020-06-06 22:48:22 realDonaldTrump
                                                            NaN
                                                                   106873
                                                                              67292
    1
          2020-06-06 22:31:20
                                realDonaldTrump
                                                                    57229
                                                                              49000
                                                            NaN
    2
                                realDonaldTrump
          2020-06-06 19:56:38
                                                            NaN
                                                                    11659
                                                                              23813
    3
          2020-06-06 14:36:08
                                 realDonaldTrump
                                                            NaN
                                                                    14080
                                                                              30242
    4
          2020-06-06 11:53:36
                                realDonaldTrump
                                                   lily_marston
                                                                    20324
                                                                              29531
    2246
          2020-01-01 01:30:35
                                                                    53516
                                realDonaldTrump
                                                            NaN
                                                                              80667
    2247
                                 realDonaldTrump
                                                         FLOTUS
                                                                    12549
          2020-01-01 01:22:28
                                                                              26329
    2248
          2020-01-01 01:16:27
                                 realDonaldTrump
                                                    SteveDaines
                                                                     4237
                                                                              12026
    2249
          2020-01-01 01:03:15
                                                     DanScavino
                                 realDonaldTrump
                                                                     1922
                                                                               9868
    2250
          2020-01-01 00:55:01
                                realDonaldTrump
                                                        jatoddy
                                                                    13499
                                                                              13715
          favorites
                                                                      text
                                                                            geo \
    0
              395287
                                                             LAW & ORDER!
                                                                            NaN
                      Wow! 96% Approval Rating in the Republican Par... NaN
    1
              282921
    2
               70283
                                                                       NaN
                                                                            NaN
    3
              131745
                                                                       NaN
                                                                            NaN
    4
                      Riot gear or military control is not necessary... NaN
              119983
    2246
              554774
                                                          HAPPY NEW YEAR!
                                                                            NaN
    2247
              128181
                                               Our fantastic First Lady!
                                                                            NaN
                      Thank you Steve. The greatest Witch Hunt in U... NaN
    2248
               48559
    2249
               37044
                      Thank you to the @dcexaminer Washington Examin...
    2250
               60116
                      One of my greatest honors was to have gotten C...
              mentions hashtags
                                                    id
    0
                   NaN
                            NaN
                                  1269400770472001539
    1
                   NaN
                            NaN
                                  1269396484048465921
    2
                   NaN
                            NaN
                                  1269357552854327296
    3
                   NaN
                            NaN
                                 1269276894819692544
    4
                                  1269235993812570112
                   NaN
                            NaN
```

```
2246
                    NaN
                             NaN 1212184310389850119
     2247
                   NaN
                             NaN 1212182267113680896
     2248
                   NaN
                             NaN
                                 1212180752936374275
     2249
           @dcexaminer
                             NaN 1212177432452698115
     2250
                   NaN
                             NaN 1212175360093229056
                                                    permalink
           https://twitter.com/realDonaldTrump/status/126...
     0
     1
           https://twitter.com/realDonaldTrump/status/126...
     2
           https://twitter.com/realDonaldTrump/status/126...
           https://twitter.com/realDonaldTrump/status/126...
     3
     4
           https://twitter.com/realDonaldTrump/status/126...
     2246 https://twitter.com/realDonaldTrump/status/121...
     2247
           https://twitter.com/realDonaldTrump/status/121...
     2248 https://twitter.com/realDonaldTrump/status/121...
     2249
           https://twitter.com/realDonaldTrump/status/121...
           https://twitter.com/realDonaldTrump/status/121...
     2250
     [2251 rows x 12 columns]
[24]: df['date']=pd.to datetime(df['date'])
      df_retweets=df.groupby(df['date'].dt.strftime('%Y-%m'))['retweets'].sum()
      order=['Jan''Feb''Mar''Apr''May''June']
      df2=df.reindex(order, axis=1)
      print(df_retweets)
      df_retweets.plot()
     date
     2020-01
                 8942560
     2020-02
                 7655817
     2020-03
                 9539551
     2020-04
                 9409956
     2020-05
                14258918
     2020-06
                 4358699
     Name: retweets, dtype: int64
[24]: <matplotlib.axes._subplots.AxesSubplot at 0x1231944d0>
```

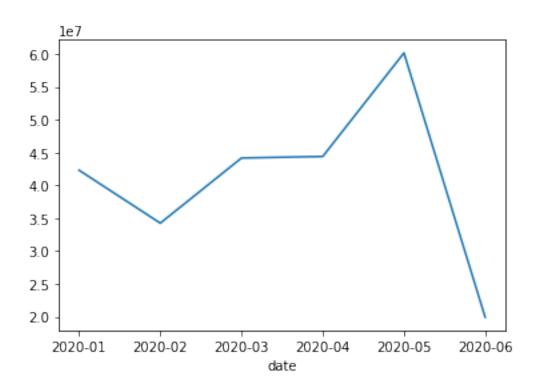


```
[14]: df['date']=pd.to_datetime(df['date'])
      df_fav=df.groupby(df['date'].dt.strftime('%Y-%m'))['favorites'].sum()
      order=['Jan''Feb''Mar''Apr''May''June']
      df2=df.reindex(order, axis=1)
      print(df_fav)
      df_fav.plot()
     date
     2020-01
                42302879
     2020-02
                34245139
     2020-03
                44164102
     2020-04
                44393603
     2020-05
                60160736
```

19923330 Name: favorites, dtype: int64

2020-06

[14]: <matplotlib.axes._subplots.AxesSubplot at 0x111ce7b10>

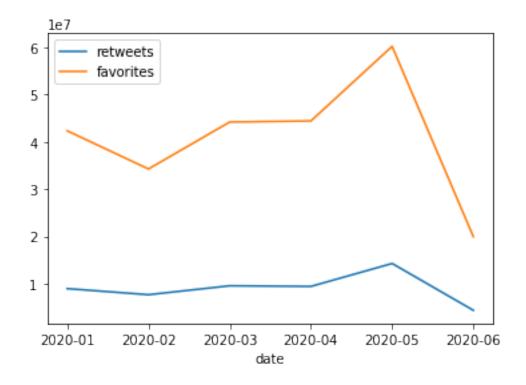


```
[28]: df['date']=pd.to_datetime(df['date'])
      df_retweets=df.groupby(df['date'].dt.strftime('%Y-%m'))['retweets'].sum()
      df_fav=df.groupby(df['date'].dt.strftime('%Y-%m'))['favorites'].sum()
      order=['Jan''Feb''Mar''Apr''May''June']
      df1=df.reindex(order, axis=0)
      print(df_retweets,df_fav)
      df3 = pd.concat([df_retweets, df_fav], axis=1)
      df3.plot()
```

```
2020-01
            8942560
2020-02
            7655817
2020-03
            9539551
2020-04
            9409956
2020-05
           14258918
2020-06
            4358699
Name: retweets, dtype: int64 date
2020-01
           42302879
2020-02
           34245139
2020-03
           44164102
2020-04
           44393603
2020-05
           60160736
2020-06
           19923330
```

date

[28]: <matplotlib.axes._subplots.AxesSubplot at 0x1238c20d0>



[]: