```
In [47]:
         import pandas as pd
In [48]: df = pd.read csv('train.csv')
In [49]: df.info()
         <class 'pandas.core.frame.DataFrame'>
         RangeIndex: 3198 entries, 0 to 3197
         Data columns (total 19 columns):
              Column
          #
                                      Non-Null Count
                                                      Dtype
              ----
                                      -----
         ---
                                                      ----
              Video id
                                      3198 non-null
                                                      object
          0
                                                      object
          1
              category_id
                                      3192 non-null
          2
              channel title
                                      3195 non-null
                                                      object
          3
              subscriber
                                      3175 non-null
                                                      float64
          4
              title
                                      3195 non-null
                                                      object
          5
              tags
                                      3046 non-null
                                                      object
          6
              description
                                      3133 non-null
                                                      object
          7
              Trend_day_count
                                      3197 non-null
                                                      float64
          8
                                                      object
              Tag count
                                      3197 non-null
          9
              Trend_tag_count
                                      3197 non-null
                                                      object
          10 comment count
                                      3198 non-null
                                                      object
              comment disabled
          11
                                      3198 non-null
                                                      object
          12 like dislike disabled
                                      3198 non-null
                                                      object
                                      3198 non-null
          13 likes
                                                      object
          14 dislike
                                      3198 non-null
                                                      object
          15 tag appered in title
                                      3197 non-null
                                                      object
          16
              views
                                      3198 non-null
                                                      object
          17
              Unnamed: 17
                                      1 non-null
                                                      float64
              Unnamed: 18
                                      1 non-null
                                                      object
          18
         dtypes: float64(3), object(16)
         memory usage: 474.8+ KB
```

In [50]: df.head(10)

Out[50]:

	Video_id	category_id	channel_title	subscriber	title	
0	HDR9SQc79	22	CaseyNeistat	9086142.0	WE WANT TO TALK ABOUT OUR MARRIAGE	
1	KNH52UF?48	24	LastWeekTonight	5937292.0	The Trump Presidency: Last Week Tonight with J	last week tonight tru
2	QTW28IRG36	23	Rudy Mancuso	4191209.0	Racist Superman Rudy Mancuso, King Bach & Le	superman rudy mancusc
3	MGL76WI]26	24	Good Mythical Morning	13186408.0	Nickelback Lyrics: Real or Fake?	rhett and link ɾ
4	TWP93KXT70	24	nigahiga	20563106.0	I Dare You: GOING BALD!?	ryan higa hi৻
5	JDJ37HWR29	28	iJustine	4652602.0	2 Weeks with iPhone X	ijustine week wi
6	INH29DD?32	24	Saturday Night Live	5292034.0	Roy Moore & Jeff Sessions Cold Open - SNL	SNL Saturday Nigł
7	ENJ69DGJ93	28	CrazyRussianHacker	10474796.0	5 Ice Cream Gadgets put to the Test	5 Ice Cream Gadget
8	ZXD32BTa68	1	20th Century Fox	2453494.0	The Greatest Showman Official Trailer 2 [HD]	Trailer Hugł
9	NCA33YGN27	25	Vox	3808198.0	Why the rise of the robots won't mean the end	vox.com vox explain sh
4						•

In [51]: df.tail(10)

Out[51]:

	Video_id	category_id	channel_title	subscriber	title	
3188	AVI91YQD43	24	Variety	230720.0	Chloe Grace Moretz on Louis C.K. and the #MeTo	
3189	UGJ10XAb33	26	AmazingPhil	4232293.0	I Read A Letter From My Younger Self	amazingphil phi
3190	PTM7WHf59	17	NBA	8707071.0	Team LeBron! Best Plays from Every All-Star on	nba highlights basl
3191	ISJ87JHs2	22	Grace Helbig	3008137.0	My Bachelor Audition Tape // Grace Helbig	grace grace helbig g
3192	ZGR33QU@74	24	Trailers Promos Teasers	NaN	The Hurricane Heist Trailer	The Hurricane He
3193	OKR48DOE67	20	EA SPORTS FIFA	3150213.0	FIFA 18 - FUT Champions Cup Barcelona - Day 1	fifa fifa ultimatı
3194	QJK69DS?91	10	JackWhiteVEVO	261596.0	Jack White - Corporation (Audio)	Alternative Corporat
3195	VHF51NVr11	10	JamesBlakeVEVO	28321.0	James Blake - If The Car Beside You Moves Ahea	James Blake If The Ca
3196	XHU22OAJ39	26	Refinery29	890739.0	Lucie Fink Trains Like A Professional Gymnast	refinery29 refine
3197	IFD79NSG47	22	MN khan	0.0	Man drops magnum of Champagne on the floor in	
4						•

In [52]: df.describe()

Out[52]:

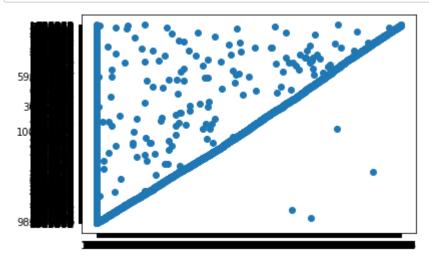
	subscriber	Trend_day_count	Unnamed: 17
count	3.175000e+03	3197.000000	1.0
mean	3.823981e+06	7.964342	2544.0
std	2.865771e+07	78.556055	NaN
min	0.000000e+00	0.000000	2544.0
25%	2.428800e+05	4.000000	2544.0
50%	1.241220e+06	7.000000	2544.0
75%	3.812622e+06	10.000000	2544.0
max	1.576229e+09	4444.000000	2544.0

In [53]: import matplotlib.pyplot as plt

In [54]: plt.hist(df['views'])
plt.show()



```
In [55]: plt.scatter(df['likes'], df['views'])
    plt.show()
```



In [56]: import seaborn as sns

In [57]: sns.heatmap(df.corr(), annot=True)
 plt.show()



In []: