In [1]:
```python
#G.Manoj
#21P023
```

In [7]:
```python
import pandas as pd
```

In [6]:
```python
df = pd.read_csv('train.csv')
```

In [8]:
```python
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 3198 entries, 0 to 3197
Data columns (total 19 columns):
 #   Column                Non-Null Count  Dtype
---  ------                --------------  -----
 0   Video_id              3198 non-null   object
 1   category_id           3192 non-null   object
 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   Tag_count             3197 non-null   object
 9   Trend_tag_count       3197 non-null   object
 10  comment_count         3198 non-null   object
 11  comment_disabled      3198 non-null   object
 12  like dislike disabled 3198 non-null   object
 13  likes                 3198 non-null   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
 18  Unnamed: 18           1 non-null      object
dtypes: float64(3), object(16)
memory usage: 474.8+ KB
```

In [9]:
```python
df.head()
```

Out[9]:

	Video_id	category_id	channel_title	subscriber	title	tags	description	Trend_day_count	Tag_count	Trend_tag_count	cor
0	HDR9SQc79	22	CaseyNeistat	9086142.0	WE WANT TO TALK ABOUT OUR MARRIAGE	SHANtell martin	SHANTELL'S CHANNEL - https://www.youtube.com/s...	6.0	21	6	
1	KNH52UF?48	24	LastWeekTonight	5937292.0	The Trump Presidency: Last Week Tonight with J...	last week tonight trump presidency|last week t...	One year after the presidential election, John...	1.0	23	1	
2	QTW28IRG36	23	Rudy Mancuso	4191209.0	Racist Superman | Rudy Mancuso, King Bach & Le...	racist superman|rudy|mancuso|king|bach|racist|...	WATCH MY PREVIOUS VIDEO ▶ \n\nSUBSCRIBE ▶ http...	10.0	22	3	
3	MGL76WI]26	24	Good Mythical Morning	13186408.0	Nickelback Lyrics: Real or Fake?	rhett and link|gmm|good mythical morning|rhett...	Today we find out if Link is a Nickelback amat...	12.0	17	5	
4	TWP93KXT70	24	nigahiga	20563106.0	I Dare You: GOING BALD!?	ryan|higa|higatv|nigahiga|i dare you|idy|rhpc|...	I know it's been a while since we did this sho...	11.0	15	7	

In [10]: `df.head(10)`

Out[10]:

	Video_id	category_id	channel_title	subscriber	title	tags	description	Trend_day_count	Tag_count	Trend_tag_count
0	HDR9SQc79	22	CaseyNeistat	9086142.0	WE WANT TO TALK ABOUT OUR MARRIAGE	SHANtell martin	SHANTELL'S CHANNEL - https://www.youtube.com/s...	6.0	21	6
1	KNH52UF?48	24	LastWeekTonight	5937292.0	The Trump Presidency: Last Week Tonight with J...	last week tonight trump presidency|last week t...	One year after the presidential election, John...	1.0	23	1
2	QTW28IRG36	23	Rudy Mancuso	4191209.0	Racist Superman	Rudy Mancuso, King Bach & Le...	racist superman|rudy|mancuso|king|bach|racist|...	WATCH MY PREVIOUS VIDEO ▶ \n\nSUBSCRIBE ▶ http...	10.0	22	3
3	MGL76WI]26	24	Good Mythical Morning	13186408.0	Nickelback Lyrics: Real or Fake?	rhett and link|gmm|good mythical morning|rhett...	Today we find out if Link is a Nickelback amat...	12.0	17	5
4	TWP93KXT70	24	nigahiga	20563106.0	I Dare You: GOING BALD!?	ryan|higa|higatv|nigahiga|i dare you|idy|rhpc|...	I know it's been a while since we did this sho...	11.0	15	7
5	JDJ37HWR29	28	iJustine	4652602.0	2 Weeks with iPhone X	ijustine|week with iPhone X|iphone x|apple|iph...	Thanks for watching! Don't forget to subscribe...	10.0	9	1
6	INH29DD?32	24	Saturday Night Live	5292034.0	Roy Moore & Jeff Sessions Cold Open - SNL	SNL|Saturday Night Live|SNL Season 43|Episode ...	Embattled Alabama Senate candidate Roy Moore (...	4.0	17	5
7	ENJ69DGJ93	28	CrazyRussianHacker	10474796.0	5 Ice Cream Gadgets put to the Test	5 Ice Cream Gadgets|Ice Cream|Cream Sandwich M...	Ice Cream Pint Combination Lock - http://amzn....	9.0	14	7
8	ZXD32BTa68	1	20th Century Fox	2453494.0	The Greatest Showman	Official Trailer 2 [HD]...	Trailer|Hugh Jackman|Michelle Williams|Zac Efr...	Inspired by the imagination of P.T. Barnum, Th...	8.0	20	1
9	NCA33YGN27	25	Vox	3808198.0	Why the rise of the robots won't mean the end ...	vox.com|vox|explain|shift change|future of wor...	For now, at least, we have better things to wo...	11.0	8	2

In [11]: `df.describe()`

Out[11]:

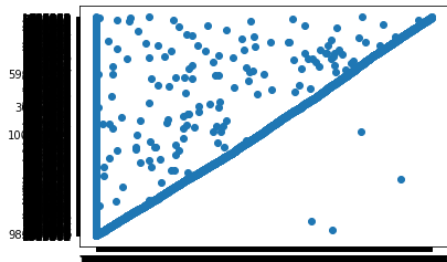|	subscriber	Trend_day_count	Unnamed: 17
count	3.175000e+03	3197.000000	1.0
mean	3.823981e+06	7.964342	2544.0
std	2.865771e+07	78.556055	NaN
min	0.000000e+00	0.000000	2544.0
25%	2.428800e+05	4.000000	2544.0
50%	1.241220e+06	7.000000	2544.0
75%	3.812622e+06	10.000000	2544.0
max	1.576229e+09	4444.000000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

In [13]:
```python
import matplotlib.pyplot as plt
plt.hist(df['views'])
plt.show()
```

In [14]:
```python
plt.scatter(df['likes'], df['views'])
plt.show()
```

In [15]:
```python
import seaborn as sns
sns.heatmap(df.corr(), annot=True)
plt.show()
```