Youtube Comments sentiment analysis

```python
In [1]: import pandas as pd
        import numpy as np
        import seaborn as sns
        import matplotlib.pyplot as plt
```

```python
In [2]: df=pd.read_csv(r'D:\Youtube_project_shan_singh\Youtube_project_shan_singh/Uscomments.csv',error_bad_lines=False)
```

```
C:\Users\dell\AppData\Local\Temp\ipykernel_1236\2459335420.py:1: FutureWarning: The error_bad_lines argument has been deprecate
d and will be removed in a future version. Use on_bad_lines in the future.


  df=pd.read_csv(r'D:\Youtube_project_shan_singh\Youtube_project_shan_singh/Uscomments.csv',error_bad_lines=False)
b'Skipping line 41589: expected 4 fields, saw 11\nSkipping line 51628: expected 4 fields, saw 7\nSkipping line 114465: expected
4 fields, saw 5\n'
b'Skipping line 142496: expected 4 fields, saw 8\nSkipping line 189732: expected 4 fields, saw 6\nSkipping line 245218: expecte
d 4 fields, saw 7\n'
b'Skipping line 388430: expected 4 fields, saw 5\n'
C:\Users\dell\AppData\Local\Temp\ipykernel_1236\2459335420.py:1: DtypeWarning: Columns (2,3) have mixed types. Specify dtype op
tion on import or set low_memory=False.
  df=pd.read_csv(r'D:\Youtube_project_shan_singh\Youtube_project_shan_singh/Uscomments.csv',error_bad_lines=False)
```

```python
In [3]: df.head()
```

Out[3]:

	video_id	comment_text	likes	replies
0	XpVt6Z1Gjjo	Logan Paul it's yo big day !!!!!	4	0
1	XpVt6Z1Gjjo	I've been following you from the start of your...	3	0
2	XpVt6Z1Gjjo	Say hi to Kong and maverick for me	3	0
3	XpVt6Z1Gjjo	MY FAN . attendance	3	0
4	XpVt6Z1Gjjo	trending 😊	3	0

```python
In [12]: df.shape
```

```
Out[12]: (691400, 4)
```

```python
In [4]: df.count()
```

```
Out[4]: video_id        691400
        comment_text    691375
        likes           691400
        replies         691400
        dtype: int64
```

```python
In [5]: df.isnull().sum()
```

```
Out[5]: video_id         0
        comment_text    25
        likes            0
        replies          0
        dtype: int64
```

```python
In [6]: from textblob import TextBlob
```

```python
In [7]: TextBlob('Say hi to Kong and maverick for me').sentiment.polarity
```

```
Out[7]: 0.0
```

```python
In [9]: l=[]
        for i in df['comment_text']:
            try:
                l.append(TextBlob(i).sentiment.polarity)
            except:
                l.append(0)
```

```python
In [11]: len(l)
```

```
Out[11]: 691400
```

In [13]:
```python
df['polarity']=1
```

In [14]:
```python
positive=df[df['polarity']==1]
```

In [15]:
```python
positive
```

Out[15]:

	video_id	comment_text	likes	replies	polarity
64	XpVt6Z1Gjjo	yu are the best	1	0	1.0
156	cLdxuaxaQwc	Power is the disease. Care is the cure. Keep...	0	0	1.0
227	WYYvHb03Eog	YAS Can't wait to get it! I just need to sell ...	0	0	1.0
307	sjlHnJvXdQs	This is priceless	0	0	1.0
319	sjlHnJvXdQs	Summed up perfectly	0	0	1.0
...	...	...	...	...	...
691373	EoejGgUNmVU	Perfect. Every version	0	0	1.0
691383	EoejGgUNmVU	Me encantaaaaa <3	0	0	1.0
691388	EoejGgUNmVU	Best song ever 🤘	0	0	1.0
691389	EoejGgUNmVU	excellent performance	0	0	1.0
691393	EoejGgUNmVU	<3	0	0	1.0

19390 rows × 5 columns

In [16]:
```python
negative=df[df['polarity']== -1]
```

In [17]:
```python
negative
```

Out[17]:

	video_id	comment_text	likes	replies	polarity
512	8wNr-NQImFg	BEN CARSON IS THE MAN!!!!! THEY HATE HIM CAUSE...	0	0	-1.0
562	8wNr-NQImFg	Well… The brain surgeon Ben Carson just proved...	0	0	-1.0
952	Ayb_2qbZHm4	WHY DID YOU MAKE FURRY FORCE?! SO NASTY!!!	0	0	-1.0
1371	vu_9muoxT50	WTF BRUH!!!!!!	0	0	-1.0
1391	vu_9muoxT50	cheeseus christ thats insane!!!	0	0	-1.0
...	...	...	...	...	...
690788	Hlt3rA-oDao	Like Kelly she evil	0	0	-1.0
690865	Ni5Uc-DdMqk	R U FUCKING KIDDING ME?!?!?!?!	11	1	-1.0
691073	4kmSATD25iY	This is horribly offensive please report	0	0	-1.0
691180	xlu6i6IT_vk	Sink holes looks terrifying sinkholes sink you...	0	0	-1.0
691224	qRoVlH1OcI4	Trump talked to the president of US Virgin Isl...	0	0	-1.0

3508 rows × 5 columns

In [18]:
```python
negative_comments=' '.join(negative['comment_text'])
```
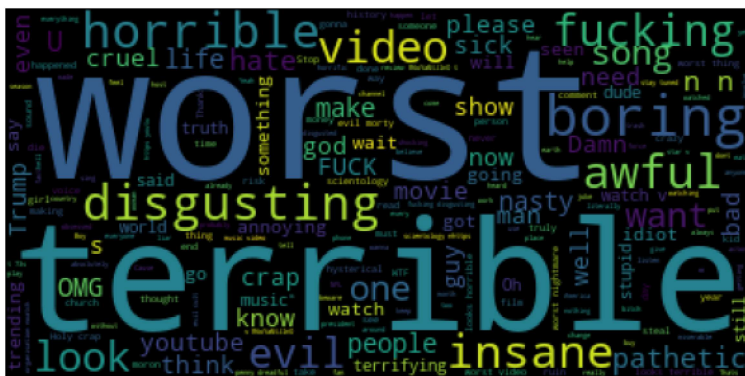
In [19]:
```python
negative_comments
```

Out[19]: "BEN CARSON IS THE MAN!!!!! THEY HATE HIM CAUSE HE EXPOSED HITLARY'S RITUAL ABUSE ON CHILDREN!!!!!!! Well… The brain surgeon Ben Carson just proved how truly insane he is… WHY DID YOU MAKE FURRY FORCE?! SO NASTY!!! WTF BRUH!!!!!! cheeseus christ that s insane!!! this is the worst thing i've heard. ever. Economy is horrible in Cuba. It's going to be years before they get out of this. Sub to me if this is terrible PATHETIC I don't like this sportscaster sounds very annoying commentators are awful T his tv show became trump witch hunt tube... and frankly, boring. Arpaio should be arrested again for horribly butchering that song. This show has become one-noted and pathetic. HARD CANDY!!!!!!!!!!!! Tired of the philosophy add !!!!!!! boring 0:22   * *laughs at terrible pun** Why is media even covering this disgusting woman anymore? How is this trending ? Awful a horrible a ttempt to try and get us to freak out this is one of the worst videos I've ever seen Whats with the horrible music? tf She is the worst. Boring boring Pls make star vs the forces of evil cookies or cake😡Pls... Oliver is an idiot! I won't read this co mment. What a Dick I am, I can't believe I just read this. I am pathetic! Terrible They got the worst brand of honey soy chip s 😣 Please let this die, you can tell the actors are miserable. can't wait :'(Don't be bringing cucumbers to the theaters t his time!! You know who you are, ya nasty OMG...he's Stephen FUCKING Hawkings !!!!   (sarcasm: off) Does Tommy knows that h e's horrible? Insane album this is boring The ripping of the evil Qur'aan and If I am no longer here, here is my advice\\nhtt ps://youtu.be/szZTiavY-6A\\nLike and RT Whoever did your makeup did a terrible job. Her book should be titled, Damn I can't e ven beat him?   I wish she would just fade into the background already. How miserable 😭 must life be to want to read this book. The like to dislike ratio to this video is just hysterical. Is she into you? If you watch I video like this, probably n o.\\nWhat's the worst that could happen? Depends on the size of ya town. Do you guys JUST hate it when people edit their comm ent??!? she has the worst fashion sense 3:33 to 3:36 they would jerk around uncontrollably, making terrifying noises, then th

In [20]:
```python
Positive_comments=' '.join(positive['comment_text'])
```

In [21]: `Positive_comments`

the credits DO THE ORIGINAL STEPHEN KING'S IT!!!!!!!!!!!!!! 😂😂😂😂😂😂😂 I downloaded and saw The Mummy 2017 in the best quality guys. here's the Iink https://twitter.com/akewdiudri/status/907980087676477442\\nyou (https://twitter.com/akewdiudri/status/907980087676477442\\nyou) must see too guys! that was awesome. Please say uncle touchy. Prease honest trailer man prease!!! Welcome to Wage Slavery! awesome! your a genius, makes me happy! jimmy did awesome throw 👏👏👏 Jennifer is the fucking best We have the winner! He's not a singer which is awesome. is the best M best on this planet awesome Power is the disease.\xa0 Care is the cure.\xa0 Keep caring for yourself and others as best as you can.\xa0 This is life. WHY DO I KEEP FREAKING LAUGHING EACH TIME I WATCH IT AGAIN ! even though I know how it will end. omg the best 😂 LIKE = MEET CELEBRITY \\nSUBSCRIBE = BECOME A BILLIONAIRE\\nSCROLL UP/DOWN = DEATH FOR YOU AND EVERYONE YOU LOVE!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! the sonic air timer was perfect no 16 on trending impressive Omgd this is a good vídeo!!!!!! Every one let's help the best we can it's time to make a change!! Far-left journalists before Irma = Cuba has the best protocol to protect their citizens, they will have no casualties\\nAfter Irma = ... My best friend is Cuban 😢 10? More like fidget spinners!!!! What if her chonis came off ? Lol! Nobodys perfect Mitchie Mercury :D <3 That is awesome video Thank you for the good music!!! EAST TENNESSEE GIRLS LOVE KID ROCK!!!! Whooohooo!!!!!! I LOVE 💑💔THIS SONG!!!!!! Afc west is afc best. Did someone notice the referee on the uper side of the field? 1:37 :D Greatest charger comeback in nfl history thumbs up if you agree GO Bolts if I could subscribe to Dude Perfect a million times I would You guys should make dude perfect sceets To be a dude perfect member it is so awesome .... Dude Perfect should do a collab with the slo mo guys the cody trust stort is excellent awesome I've been the best since I step in, take a hooker to the motherfucking Jetson Great entertainment! I'll be cheering for Joe Arpaio! Keep up the great work! hair awesome I love the 90s!!!! Love the Hair!!!! I just can't get over this look tlday, the outfit, the jewelry ,makeup!!!, hairrrr!!!! eeeeee all it's perfect This is the best elevator music I've listened to I never thought I'd say that b

In [22]: `from wordcloud import WordCloud, STOPWORDS`

In [23]:
```
word_cloud=WordCloud(stopwords=set(STOPWORDS)).generate(negative_comments)
plt.figure(figsize=(10,10))
plt.imshow(word_cloud)
plt.axis(False)
```

Out[23]: (-0.5, 399.5, 199.5, -0.5)

In [24]:
```
word_cloud=WordCloud(stopwords=set(STOPWORDS)).generate(Positive_comments)
plt.figure(figsize=(10,10))
plt.imshow(word_cloud)
plt.axis(False)
```

Out[24]: (-0.5, 399.5, 199.5, -0.5)

Comments-Emoji Analysis

In [25]: `df1=df.head(1000)`

In [26]: `df1`

Out[26]:

	video_id	comment_text	likes	replies	polarity
0	XpVt6Z1Gjjo	Logan Paul it's yo big day !!!!!	4	0	0.000000
1	XpVt6Z1Gjjo	I've been following you from the start of your...	3	0	0.000000
2	XpVt6Z1Gjjo	Say hi to Kong and maverick for me	3	0	0.000000
3	XpVt6Z1Gjjo	MY FAN . attendance	3	0	0.000000
4	XpVt6Z1Gjjo	trending 😊	3	0	0.000000
...	...	...	...	...	...
995	Ayb_2qbZHm4	Generic attention comment	0	0	0.000000
996	Ayb_2qbZHm4	Zero amount of funny	0	0	0.250000
997	Ayb_2qbZHm4	Honest? I see no random color hairgender studi...	0	0	0.341667
998	Ayb_2qbZHm4	What, no joke about how you can't apply if you...	0	0	0.150000
999	CsdzflTXBVQ	Floyd Mayweather, the swimmer.	3331	261	0.000000

1000 rows × 5 columns

In [27]: `!pip install emoji`

Requirement already satisfied: emoji in c:\users\dell\anaconda3\lib\site-packages (2.2.0)

In [28]: `import emoji`

In [29]: `c=df1['comment_text']`

In [30]: `c`

Out[30]:
```
0                 Logan Paul it's yo big day !!!!!
1       I've been following you from the start of your...
2            Say hi to Kong and maverick for me
3                       MY FAN . attendance
4                              trending 😊
                      ...
995                 Generic attention comment
996                     Zero amount of funny
997     Honest? I see no random color hairgender studi...
998     What, no joke about how you can't apply if you...
999                 Floyd Mayweather, the swimmer.
Name: comment_text, Length: 1000, dtype: object
```

In [31]:
```python
l=[]
for i in c:
    for j in i:
        if j in emoji.distinct_emoji_list(i):
            l.append(j)
```

In [32]: `l`

Out[32]: `['😊',`

```python
In [33]: dict1 = {}
         for i in l:
             if i in dict1:
                 dict1[i] += 1
             else: dict1[i] = 1
```

```python
In [34]: obj=list(dict1.keys())
         freq=list(dict1.values())
```
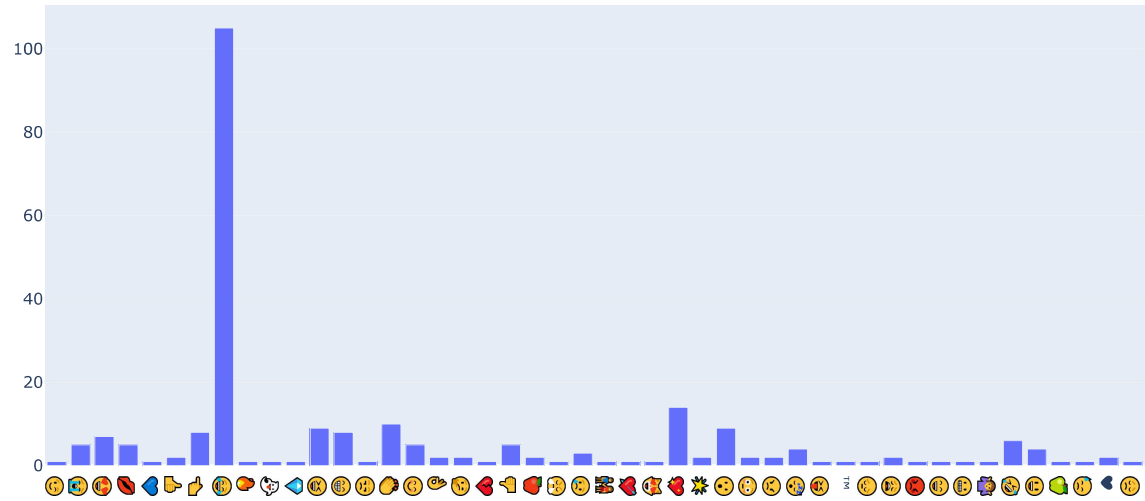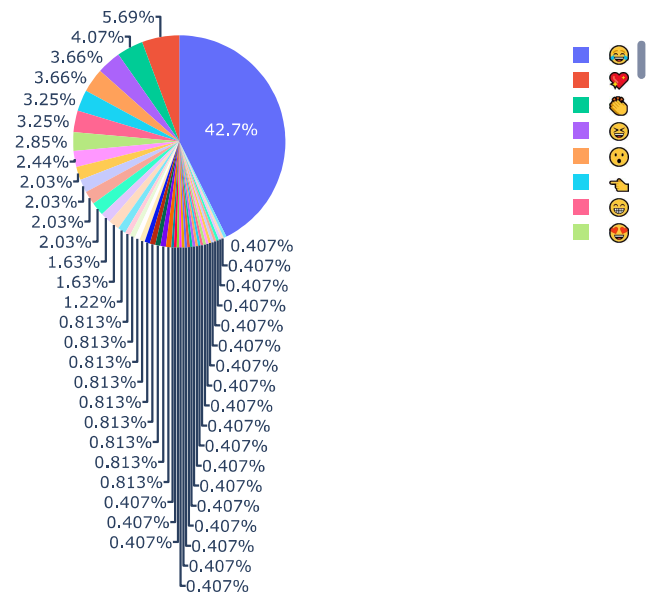
```python
In [35]: import plotly.graph_objs as go
```

```python
In [36]: from plotly.offline import iplot
```

```python
In [37]: file=go.Bar(x=obj,y=freq)
```

```python
In [38]: file1=go.Pie(labels=obj,values=freq)
```

In [39]:
```
iplot([file1])
iplot([file])
```


In [ ]: