Objective: This project aims to Analyze and visualize sentiment patterns in social media(Twitter) data to understand public opinion and attitudes towards specific topics or brands.

Sentiment datasets are collections of text data that have been labeled with a sentiment, such as positive, negative, or neutral. They are used to train machine learning models to perform sentiment analysis, which is the task of automatically identifying the sentiment of a piece of text.

The Twitter Sentiment dataset is a collection of tweets that have been labeled as positive, negative, or neutral.

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings("ignore")
```

```
Twitter= pd.read_csv('/content/twitter_training.csv')
```

```
Twitter
```

	2401	Borderlands	Positive	im getting on borderlands and i will murder you all ,
0	2401	Borderlands	Positive	I am coming to the borders and I will kill you...
1	2401	Borderlands	Positive	im getting on borderlands and i will kill you ...
2	2401	Borderlands	Positive	im coming on borderlands and i will murder you...
3	2401	Borderlands	Positive	im getting on borderlands 2 and i will murder ...
4	2401	Borderlands	Positive	im getting into borderlands and i can murder y...
...	...	...	...	...
74676	9200	Nvidia	Positive	Just realized that the Windows partition of my...
74677	9200	Nvidia	Positive	Just realized that my Mac window partition is ...
74678	9200	Nvidia	Positive	Just realized the windows partition of my Mac ...
74679	9200	Nvidia	Positive	Just realized between the windows partition of...
74680	9200	Nvidia	Positive	Just like the windows partition of my Mac is l...

74681 rows × 4 columns

Next steps: Generate code with Twitter View recommended plots

```
Twitter.head()
```

	2401	Borderlands	Positive	im getting on borderlands and i will murder you all ,
0	2401	Borderlands	Positive	I am coming to the borders and I will kill you...
1	2401	Borderlands	Positive	im getting on borderlands and i will kill you ...
2	2401	Borderlands	Positive	im coming on borderlands and i will murder you...
3	2401	Borderlands	Positive	im getting on borderlands 2 and i will murder ...
4	2401	Borderlands	Positive	im getting into borderlands and i can murder y...

Next steps: Generate code with Twitter View recommended plots

```
Twitter.shape
```

```
(53826, 4)
```

```
Twitter.describe()
```

	2401
count	53826.000000
mean	6289.110950
std	3939.111938
min	1.000000
25%	2664.000000
50%	6190.000000
75%	9685.000000
max	13200.000000

```
Twitter.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 53826 entries, 0 to 53825
Data columns (total 4 columns):
 #   Column                                                Non-Null Count  Dtype 
---  ------                                                --------------  ----- 
 0   2401                                                  53826 non-null  int64 
 1   Borderlands                                           53826 non-null  object
 2   Positive                                              53826 non-null  object
 3   im getting on borderlands and i will murder you all ,  53334 non-null  object
dtypes: int64(1), object(3)
memory usage: 1.6+ MB
```

```
Twitter.isnull().sum()
```

```
2401                                                    0
Borderlands                                             0
Positive                                                0
im getting on borderlands and i will murder you all ,    492
dtype: int64
```

Data Cleaning and EDA:

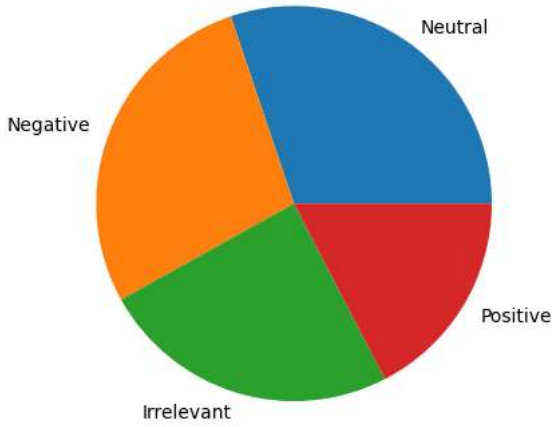
```
Twitter.drop(["2401"],axis = 1,inplace = True)
Twitter.head()
```

	Borderlands	Positive	im getting on borderlands and i will murder you all ,
0	Borderlands	Positive	I am coming to the borders and I will kill you...
1	Borderlands	Positive	im getting on borderlands and i will kill you ...
2	Borderlands	Positive	im coming on borderlands and i will murder you...
3	Borderlands	Positive	im getting on borderlands 2 and i will murder ...
4	Borderlands	Positive	im getting into borderlands and i can murder y...

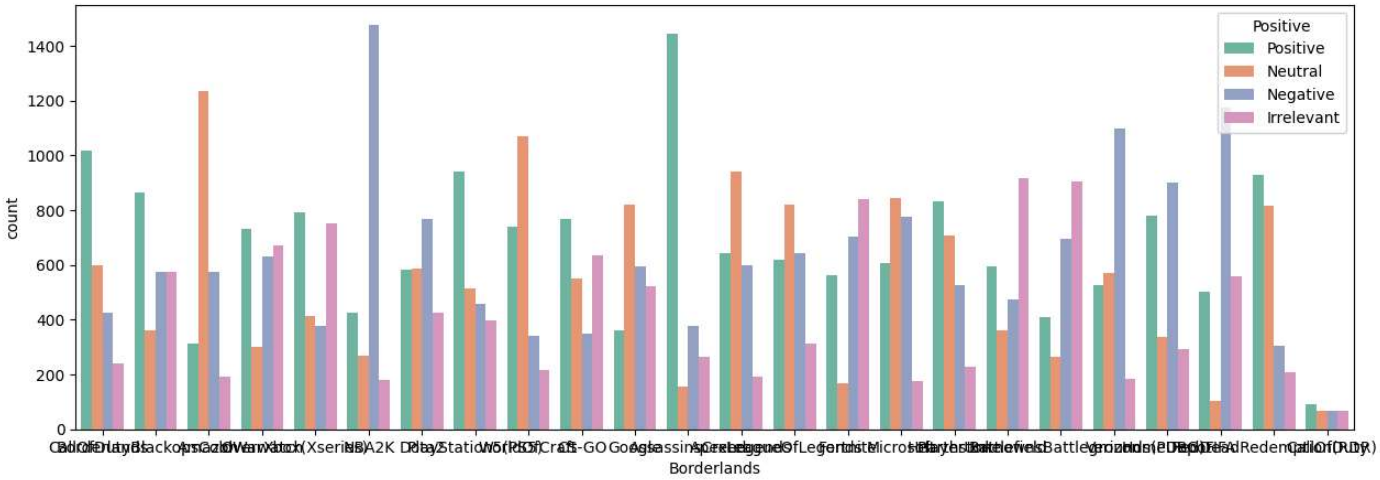
```
Twitter['Positive'].value_counts()
```

```
Positive      16079
Negative      14911
Neutral       12882
Irrelevant     9954
Name: Positive, dtype: int64
```

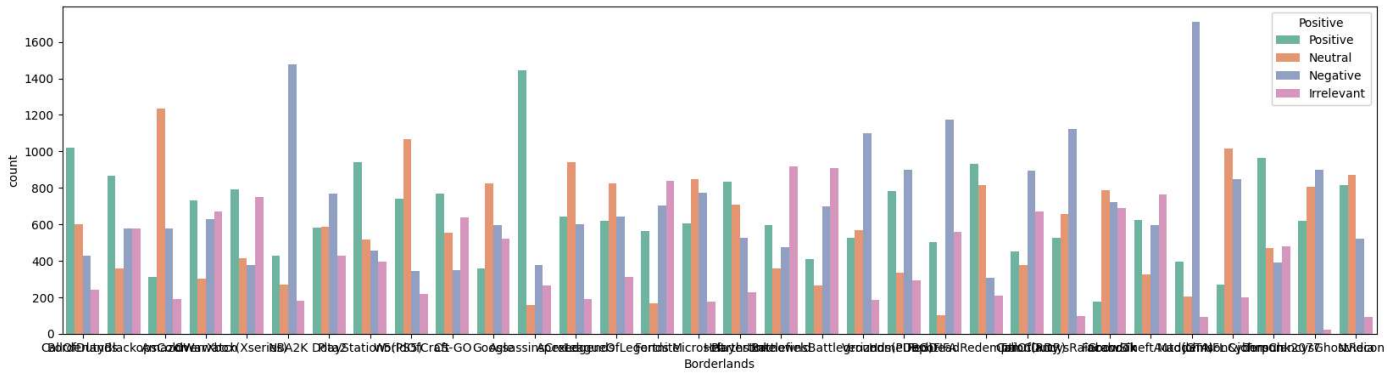
```
plt.pie(Twitter['Positive'].value_counts(), labels=['Neutral','Negative','Irrelevant','Positive'])
plt.show()
```




```
plt.figure(figsize = (15,5))
sns.countplot(x = "Borderlands",hue = "Positive",data = Twitter,palette ='Set2')
plt.show()
```




```
plt.figure(figsize = (20,5))
sns.countplot(x = "Borderlands",hue = "Positive",data = Twitter,palette ='Set2')
plt.show()
```



+ Code + Text