

```
In [1]: import numpy as np
import pandas as pd
```

```
In [2]: data = pd.read_csv("CFD.csv");
```

```
In [3]: data = data.dropna()
data.head()
```

Out[3]:

	Text, Sentiment, Source, Date/Time, User ID, Location, Confidence Score
0	"I love this product!", Positive, Twitter, 202...
1	"The service was terrible.", Negative, Yelp Re...
2	"This movie is amazing!", Positive, IMDb, 2023...
3	"I'm so disappointed with their customer suppo...
4	"Just had the best meal of my life!", Positive...

```
In [5]: dataord = pd.DataFrame(columns = ['Text', 'Sentiment', 'Source', 'Date/Time', 'User ID', 'Location', 'Confidence Score'])
for i in data.index:
    aux = data.iloc[i,0].split(",")
    dataord.loc[len(dataord)] = aux
dataord.head()
```

Out[5]:

	Text	Sentiment	Source	Date/Time	User ID	Location	Confidence Score
0	"I love this product!"	Positive	Twitter	2023-06-15 09:23:14	@user123	New York	0.85
1	"The service was terrible."	Negative	Yelp Reviews	2023-06-15 11:45:32	user456	Los Angeles	0.65
2	"This movie is amazing!"	Positive	IMDb	2023-06-15 14:10:22	moviefan789	London	0.92
3	"I'm so disappointed with their customer suppo...	Negative	Online Forum	2023-06-15 17:35:11	forumuser1	Toronto	0.78
4	"Just had the best meal of my life!"	Positive	TripAdvisor	2023-06-16 08:50:59	foodie22	Paris	0.88

```
In [6]: dataord.shape
```

Out[6]: (96, 7)

```
In [7]: dataord.isnull().sum()
```

Out[7]:

Text	0
Sentiment	0
Source	0
Date/Time	0
User ID	0
Location	0
Confidence Score	0

dtype: int64

```
In [9]: import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
```

```
In [10]: dataord.describe()
```

Out[10]:

	Text	Sentiment	Source	Date/Time	User ID	Location	Confidence Score
count	96	96	96	96	96	96	96
unique	75	2	27	75	73	11	25
top	"I love this product!"	Positive	Online Store	2023-06-15 09:23:14	user456	Sydney	0.92
freq	2	53	11	2	4	12	9

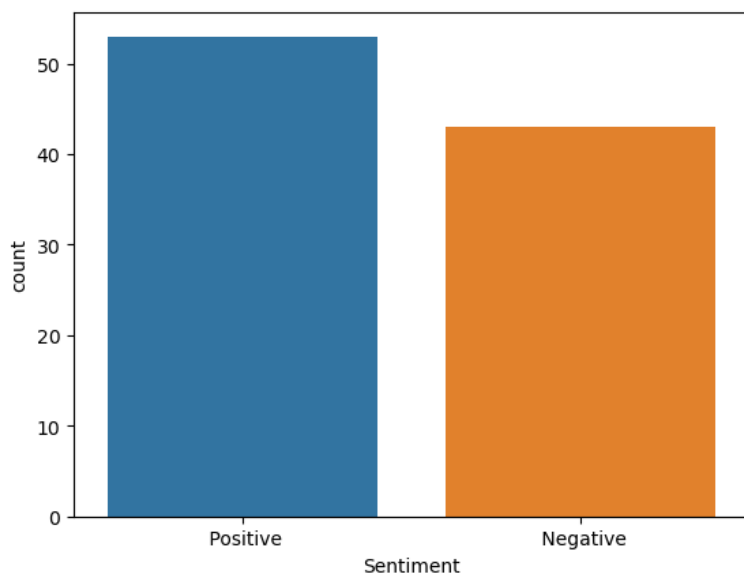
```
In [11]: dataord.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 96 entries, 0 to 95
Data columns (total 7 columns):
#   Column              Non-Null Count  Dtype
---  -
0   Text                 96 non-null    object
1   Sentiment            96 non-null    object
2   Source               96 non-null    object
3   Date/Time            96 non-null    object
4   User ID              96 non-null    object
5   Location             96 non-null    object
6   Confidence Score     96 non-null    object
dtypes: object(7)
memory usage: 6.0+ KB
```

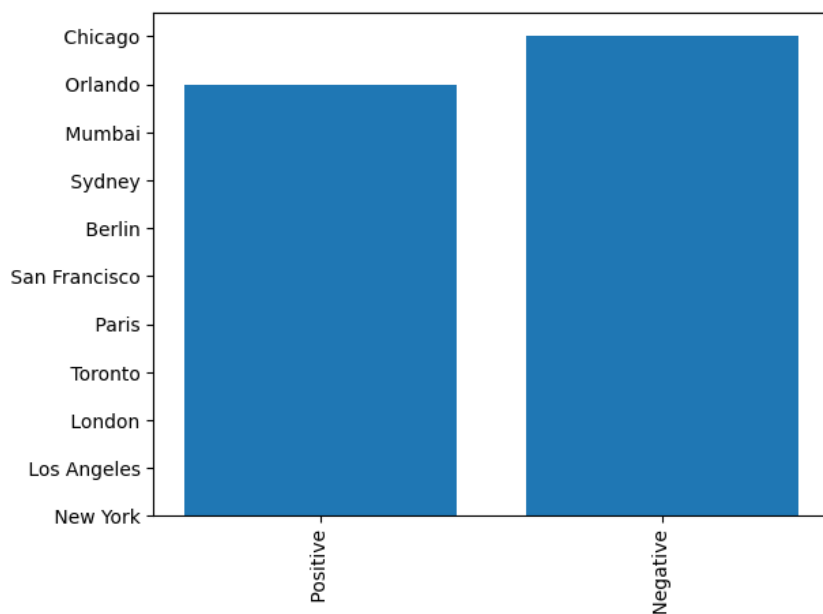
```
In [12]: dataord.columns
```

```
Out[12]: Index(['Text', 'Sentiment', 'Source', 'Date/Time', 'User ID', 'Location',  
              'Confidence Score'],  
              dtype='object')
```

```
In [13]: sns.countplot(data = dataord , x= 'Sentiment' )  
plt.show()
```



```
In [25]: plt.bar(dataord['Sentiment'],dataord['Location'])  
plt.xticks(rotation = 90)  
plt.show()
```



```
In [27]: sns.distplot(x= dataord['Confidence Score'])
```

C:\Users\Red Devil\AppData\Local\Temp\ipykernel_12384\882927438.py:1: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see <https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751>

```
sns.distplot(x= dataord['Confidence Score'])
```

```
Out[27]: <Axes: ylabel='Density'>
```

