

✓
1s

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

import os
for dirname, _, filenames in os.walk('content'):
    for filename in filenames:
        print(os.path.join(dirname, filename))
```

✓
0s

```
df = pd.read_csv('content/sentiment_data.csv')
df.head(5)
```

Unnamed:
0.1Unnamed:
0

Text

0

0

0

Enjoying
a
beautiful
day at the
park! ...

1

1

1

Traffic
was
terrible
this
morning.
...

2

2

2

Just
finished
an
amazing
workout!

✓
0s

```
print('Columns of dataset: ', df.columns)
print('Dimension of dataset: ', df.shape)
print('Information of dataset: ', df.info())
```



```
Columns of dataset: Index(['Unnamed: 0.1', 'Unnamed: 0',
                          'Text', 'Sentiment', 'Timestamp',
                          'User', 'Platform', 'Hashtags', 'Retweets',
                          'Likes', 'Country', 'Year', 'Month', 'Day', 'Hour'],
                          dtype='object')
```

```
Dimension of dataset: (732, 15)
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 732 entries, 0 to 731
Data columns (total 15 columns):
```

#	Column	Non-Null Count
0	Unnamed: 0.1	732 non-null
1	Unnamed: 0	732 non-null
2	Text	732 non-null
3	Sentiment	732 non-null
4	Timestamp	732 non-null
5	User	732 non-null
6	Platform	732 non-null
7	Hashtags	732 non-null
8	Retweets	732 non-null
9	Likes	732 non-null
10	Country	732 non-null
11	Year	732 non-null
12	Month	732 non-null
13	Day	732 non-null
14	Hour	732 non-null

```
dtypes: float64(2), int64(6), object(7)
```



✓
0s



```
df.isnull().sum()
```



0

Unnamed: 0.1 0

Unnamed: 0 0

Text 0

Sentiment 0

Timestamp 0

User 0

Platform 0

Hashtags 0

Retweets 0

Likes 0

Country 0

Year 0

Month 0

Day 0

Hour 0

✓
0s`df.duplicated().sum()`

0

✓
0s`df1=df.drop(['Unnamed: 0.1', 'Unnan`✓
0s`df1.describe()`

Retweets

Likes

	Retweets	Likes	
count	732.000000	732.000000	732.0
mean	21.508197	42.901639	2020.4
std	7.061286	14.089848	2.8
min	5.000000	10.000000	2010.0
25%	17.750000	34.750000	2019.0
50%	22.000000	43.000000	2021.0
75%	25.000000	50.000000	2023.0
max	40.000000	80.000000	2023.0

✓
0s`df1.describe(include=['object'])`

✓
0s

```
df1.describe(include=['object'])
```



	Text	Sentiment	T
--	------	-----------	---

count	732	732	
unique	707	279	
top	A compassionate rain, tears of empathy fallin...	Positive	
freq	3	44	

✓
0s

```
df1['Text'] = df1['Text'].str.strip()  
df1['Sentiment'] = df1['Sentiment'].  
df1['User'] = df1['User'].str.strip()  
df1['Platform'] = df1['Platform'].st  
df1['Hashtags'] = df1['Hashtags'].st  
df1['Country'] = df1['Country'].str.
```

✓
0s

```
print("Print unique values in 'Plat  
print("Value counts in 'Platform' c
```



	Print unique values in 'Platform'
--	-----------------------------------

Value counts in 'Platform' column
Platform

✓
0s

df1.sample(3)



Text Sentiment Timesta

463	Betrayal, a venomous serpent slithering throug...	Betrayal	2021-03- 17:45
-----	---	----------	-------------------

601	Started a blog about random thoughts and musin...	Curiosity	2023-06- 17:30
-----	---	-----------	-------------------

584	Decided to study for exams but ended up making...	Surprise	2023-05- 13:15
-----	--	----------	-------------------

✓
0s

```
import datetime as dt
df1['time'] = pd.to_datetime(df1.Ti
df1['Date'] = df1['time'].dt.date
df1['Time'] = df1['time'].dt.time
#df1['new_Day']=df1['time'].dt.day
df1['Weekday']=df1['time'].dt.weekc
```


✓
0s

```
import datetime as dt
df1['time'] = pd.to_datetime(df1['Time'])
df1['Date'] = df1['time'].dt.date
df1['Time'] = df1['time'].dt.time
#df1['new_Day']=df1['time'].dt.day
df1['Weekday']=df1['time'].dt.weekday
#df1.drop(['Timestamp', 'time'], axis=1)
df1.head(2)
```



	Text	Sentiment	Timestamp
--	------	-----------	-----------

0	Enjoying a beautiful day at the park!	Positive	2023-01-15 12:30:00
---	---	----------	------------------------

1	Traffic was terrible this morning.	Negative	2023-01-15 08:45:00
---	--	----------	------------------------

Next
steps:

code

df1



recommended

✓
0s

```
df2=df1.drop(['Timestamp', 'time'], axis=1)
df2.head(2)
```



	Text	Sentiment	User
--	------	-----------	------

✓
0s

```
df2=df1.drop(['Timestamp', 'time'],  
df2.head(2)
```



Text

Sentiment

User

0	Enjoying a beautiful day at the park!	Positive	User123
---	---	----------	---------

1	Traffic was terrible this morning.	Negative	CommuterX
---	--	----------	-----------

Next
steps:

code

df2



recommender

✓
1s

```
df2['Monthname']=df2['Month'].replace  
df2['Weekdayname']=df2['Weekday'].replace  
df2.head(2)
```



Text

Sentiment

User

0	Enjoying a beautiful day at the park!	Positive	User123
---	---	----------	---------

✓1s

▶

TextSentimentUser



0	Enjoying a beautiful day at the park!	Positive	User123
---	---	----------	---------

1	Traffic was terrible this morning.	Negative	CommuterX
---	--	----------	-----------

Next steps:

code

df2

☒ recommender

✓0s

▶

`2.drop('Weekday', axis=1).sample(2)`



TextSentiment

489	In the carnival of emotions, the rollercoaster...	Thrill	Emot
-----	--	--------	------

239	Melancholy as a companion, painting the conver	Melancholy	Wis
-----	--	------------	-----

✓
0s

```
print('Name of value in the Monthname c')  
print('Name of value in the Weekdayname c')
```



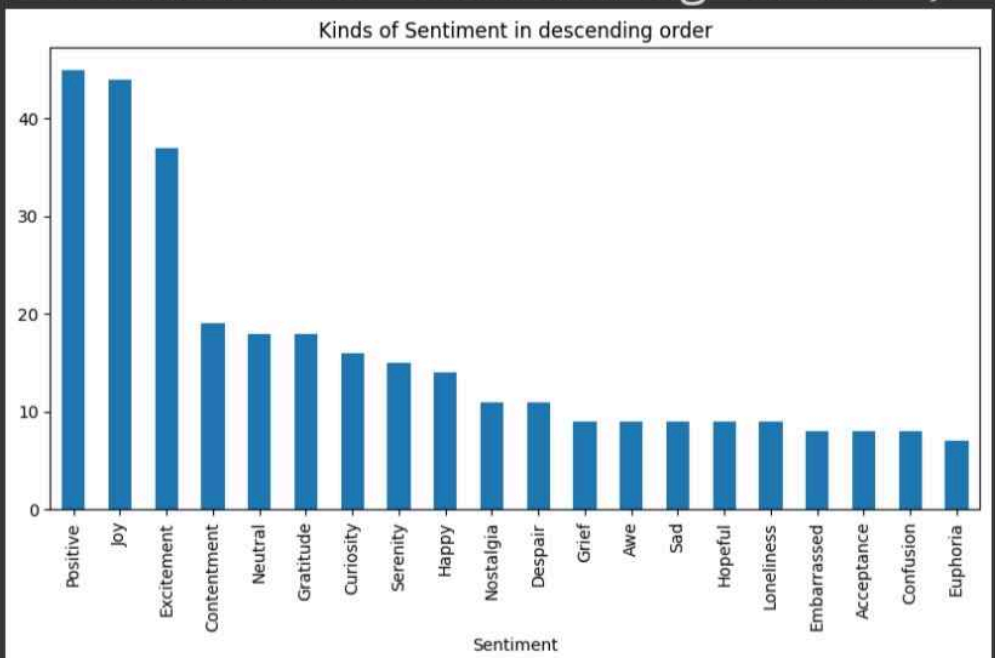
```
Name of value in the Monthname c  
Name of value in the Weekdayname c
```

✓
4s

```
import matplotlib.pyplot as plt  
import seaborn as sns  
  
plt.figure(figsize=(10, 5))  
df2['Sentiment'].value_counts().nl  
plt.title("Kinds of Sentiment in de
```



```
Text(0.5, 1.0, 'Kinds of  
Sentiment in descending order')
```

✓
1s

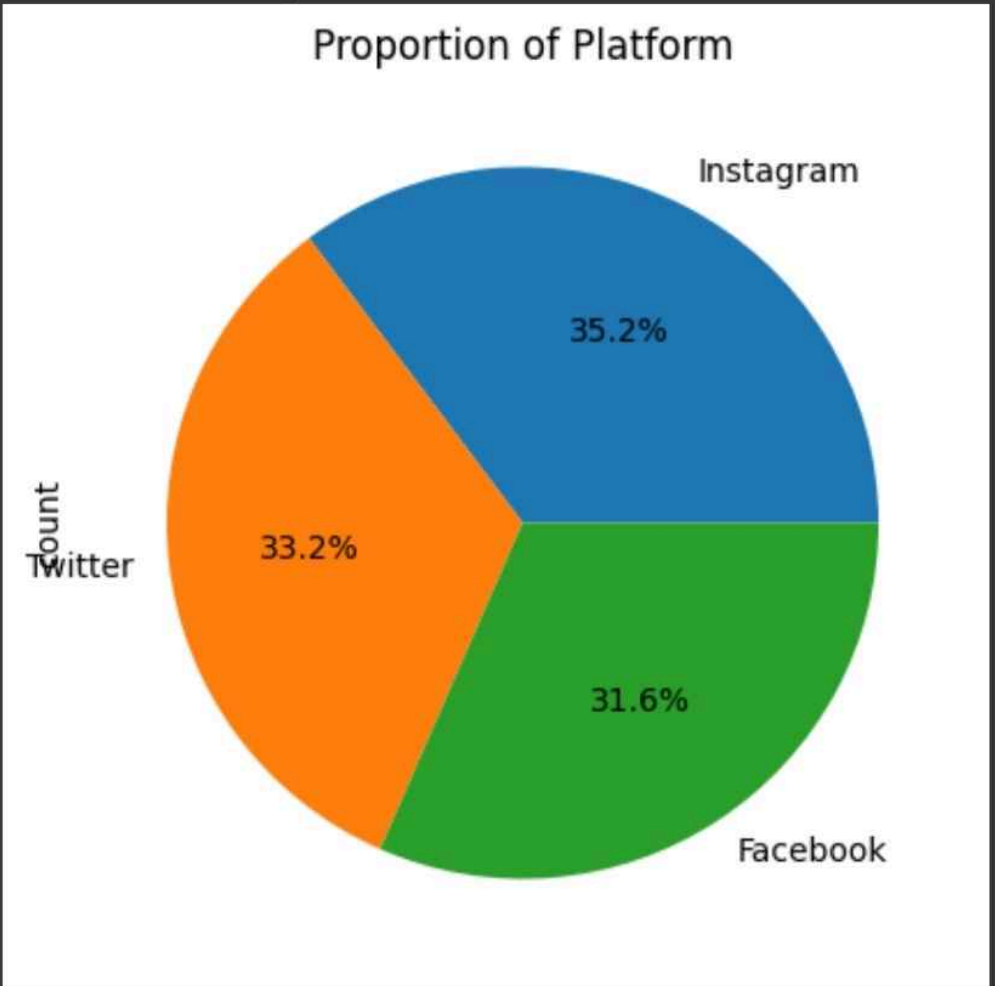
```
plt.figure(figsize=(10, 5))  
df2['Platform'].value_counts().plot  
plt.title("Proportion of Platform")
```

✓
1s

```
plt.figure(figsize=(10, 5))  
df2['Platform'].value_counts().plot  
plt.title("Proportion of Platform")
```



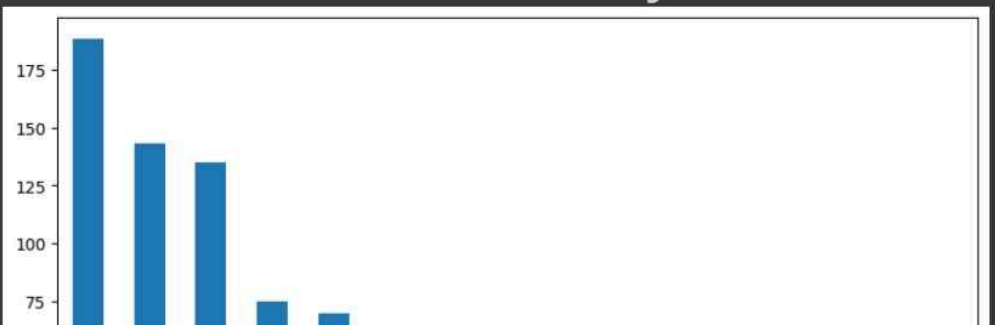
```
Text(0.5, 1.0, 'Proportion of  
Platform')
```

✓
1s

```
plt.figure(figsize=(10, 5))  
df2['Country'].value_counts().nlarg
```



```
<Axes: xlabel='Country'>
```

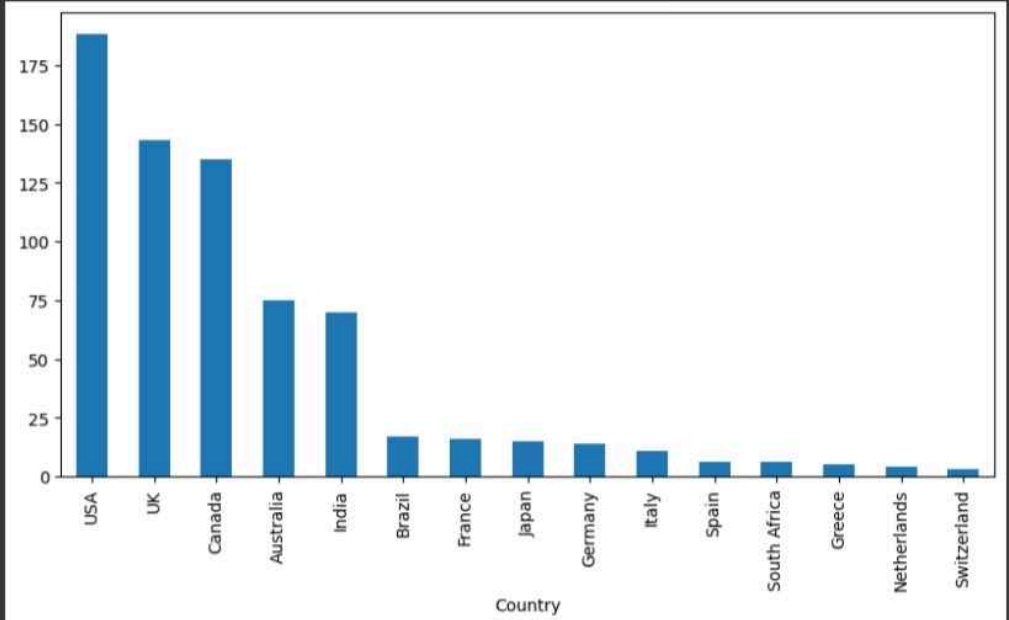


✓
1s

```
plt.figure(figsize=(10, 5))  
df2['Country'].value_counts().nlarg
```



<Axes: xlabel='Country'>

✓
0s

```
lue: {column}:{df2[column].min())"
```



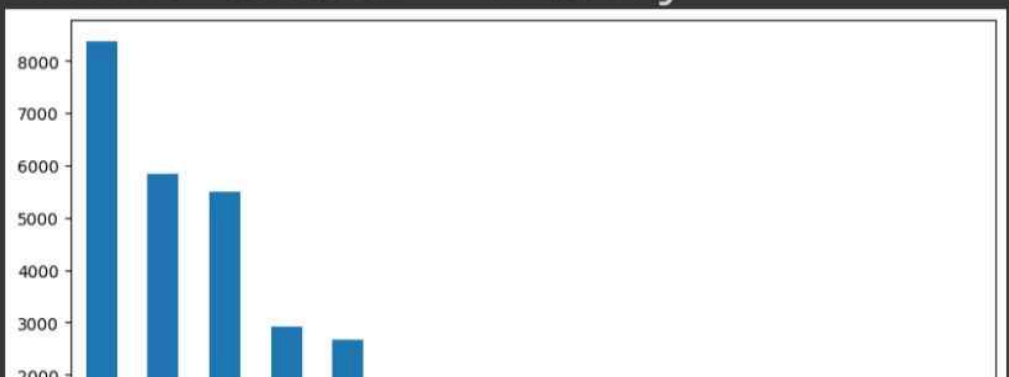
Maxiumn value: Year:2023 | Minim
Maxiumn value: Likes:80.0 | Mini
Maxiumn value: Retweets:40.0 | M

✓
1s

```
plt.figure(figsize=(10, 5))  
df2.groupby('Country')['Likes'].sun
```



<Axes: xlabel='Country'>

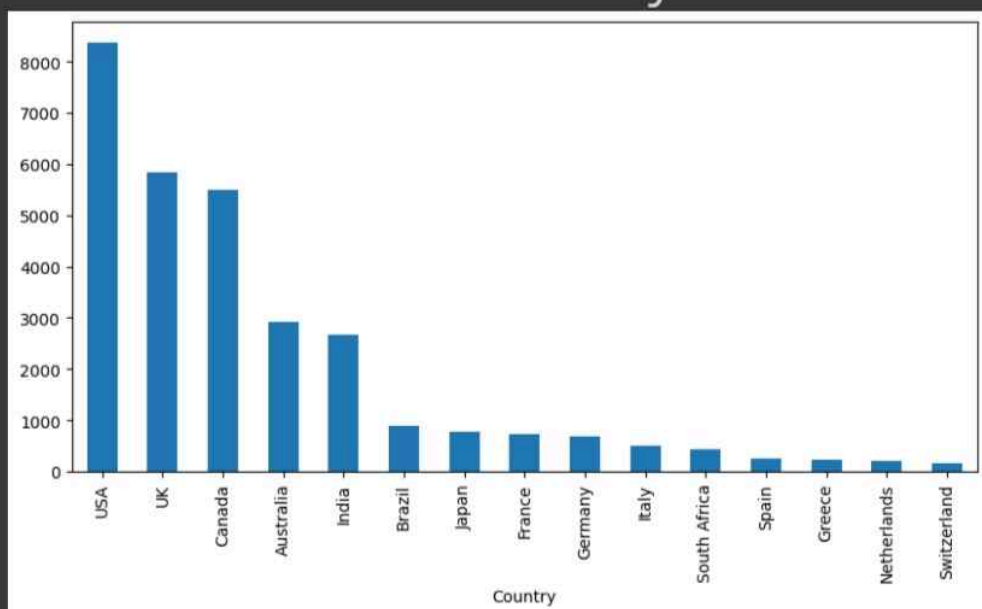


✓
1s

```
plt.figure(figsize=(10, 5))  
df2.groupby('Country')['Likes'].sum
```



<Axes: xlabel='Country'>

✓
2s

```
plt.figure(figsize=(10, 5))  
df3=df2.groupby('Hashtags')['Retwee  
df3.plot(kind='bar')  
plt.xticks(rotation=80)
```



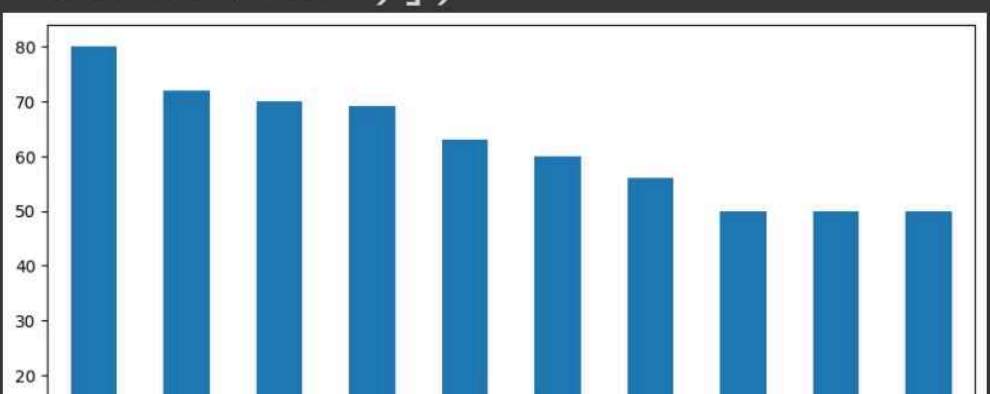
```
(array([0, 1, 2, 3, 4, 5, 6, 7,  
8, 9]),  
 [Text(0, 0, '#Wonder  
#StargazingAdventure'),  
   Text(1, 0, '#Playful  
#CarnivalEscapade'),  
   Text(2, 0, '#Harmony  
#MusicalUnity'),  
   Text(3, 0, '#Proud  
#ScalingPeaks'),  
   Text(4, 0, '#Compassionate  
#TearsOfEmpathy'),  
   Text(5, 0, '#Coziness
```


✓
2s

```
plt.figure(figsize=(10, 5))  
df3=df2.groupby('Hashtags')['Retwee  
df3.plot(kind='bar')  
plt.xticks(rotation=80)
```



```
(array([0, 1, 2, 3, 4, 5, 6, 7,  
8, 9]),  
 [Text(0, 0, '#Wonder  
#StargazingAdventure'),  
  Text(1, 0, '#Playful  
#CarnivalEscapade'),  
  Text(2, 0, '#Harmony  
#MusicalUnity'),  
  Text(3, 0, '#Proud  
#ScalingPeaks'),  
  Text(4, 0, '#Compassionate  
#TearsOfEmpathy'),  
  Text(5, 0, '#Coziness  
#WarmWinterEvening'),  
  Text(6, 0, '#Inspiration  
#ForestWhispers'),  
  Text(7, 0, '#Playful  
#JugglingResponsibilities'),  
  Text(8, 0, '#Radiance  
#SpringBlooms'),  
  Text(9, 0, '#TimelessTunes  
#SeniorJazz')])
```

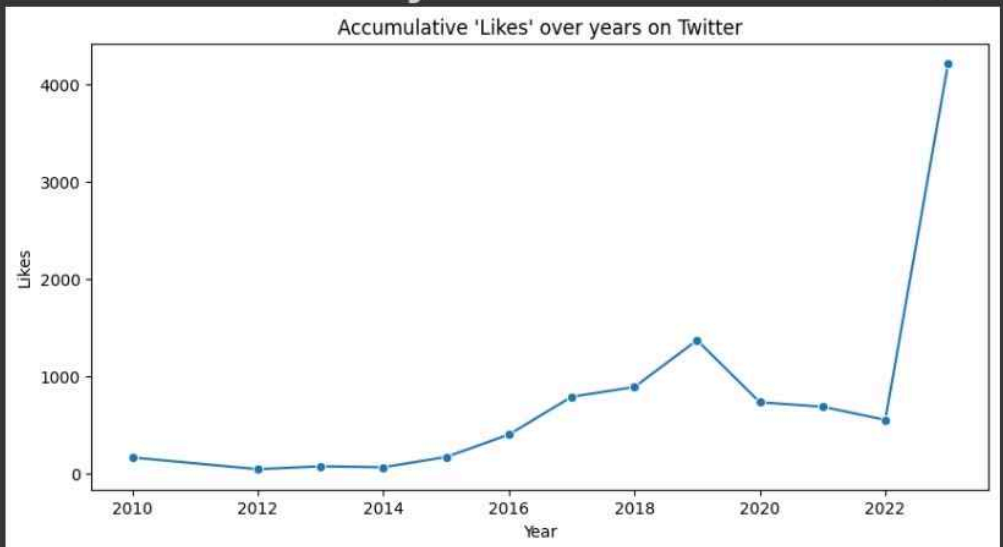


✓
1s

```
Twitter=df2[df2['Platform']=='Twitter']
df5=Twitter.groupby('Year')['Likes'].sum()
plt.figure(figsize=(10, 5))
sns.lineplot(data=df5, x='Year', y='Likes')
plt.title("Accumulative 'Likes' over years on Twitter")
```



```
Text(0.5, 1.0, "Accumulative  
'Likes' over years on Twitter")
```

✓
1s

```
Instagram=df2[df2['Platform']=='Instagram']
df_ins=Instagram.groupby('Year')['Retweets'].sum()

plt.figure(figsize=(12, 5))
sns.lineplot(data=df_ins, x='Year', y='Retweets')
for index, value in df_ins.iterrows():
    plt.text(value['Year'], value['Retweets'], str(value['Year']))
plt.title("Accumulative 'Retweets' over time on Instagram")
```



```
Text(0.5, 1.0, "Accumulative  
'Retweets' over time on  
Instagram")
```



✓
1s

```
Instagram=df2[df2['Platform']=='Ins  
df_ins=Instagram.groupby('Year')['F
```

```
plt.figure(figsize=(12, 5))  
sns.lineplot(data=df_ins, x='Year',  
for index, value in df_ins.iterrows:  
    plt.text(value['Year'], value['  
plt.title("Accumulative 'Retweets'
```



```
Text(0.5, 1.0, "Accumulative  
'Retweets' over time on  
Instagram")
```

