

```
In [7]: import pandas as pd  
import numpy as np  
import seaborn as sns  
import warnings  
warnings.filterwarnings('ignore')
```

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In [11]: data = pd.read_csv(r'C:\Users\raj20\Downloads\data.csv',error_bad_lines=False)
data.head()
```

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b'Skipping line 2810: expected 2 fields, saw 5\nSkipping line 4641: expected 2 fields, saw 5\nSkipping line 7171: expected 2 fields, saw 5\nSkipping line 11220: expected 2 fields, saw 5\nSkipping line 13809: expected 2 fields, saw 5\nSkipping line 14132: expected 2 fields, saw 5\nSkipping line 14293: expected 2 fields, saw 5\nSkipping line 14865: expected 2 fields, saw 5\nSkipping line 17419: expected 2 fields, saw 5\nSkipping line 22801: expected 2 fields, saw 5\nSkipping line 25001: expected 2 fields, saw 5\nSkipping line 26603: expected 2 fields, saw 5\nSkipping line 26742: expected 2 fields, saw 5\nSkipping line 29702: expected 2 fields, saw 5\nSkipping line 32767: expected 2 fields, saw 5\nSkipping line 32878: expected 2 fields, saw 5\nSkipping line 35643: expected 2 fields, saw 5\nSkipping line 36550: expected 2 fields, saw 5\nSkipping line 38732: expected 2 fields, saw 5\nSkipping line 40567: expected 2 fields, saw 5\nSkipping line 40576: expected 2 fields, saw 5\nSkipping line 41864: expected 2 fields, saw 5\nSkipping line 46861: expected 2 fields, saw 5\nSkipping line 47939: expected 2 fields, saw 5\nSkipping line 48628: expected 2 fields, saw 5\nSkipping line 48908: expected 2 fields, saw 5\nSkipping line 57582: expected 2 fields, saw 5\nSkipping line 58782: expected 2 fields, saw 5\nSkipping line 58984: expected 2 fields, saw 5\nSkipping line 61518: expected 2 fields, saw 5\nSkipping line 63451: expected 2 fields, saw 5\nSkipping line 68141: expected 2 fields, saw 5\nSkipping line 72083: expected 2 fields, saw 5\nSkipping line 74027: expected 2 fields, saw 5\nSkipping line 77811: expected 2 fields, saw 5\nSkipping line 83958: expected 2 fields, saw 5\nSkipping line 85295: expected 2 fields, saw 5\nSkipping line 88665: expected 2 fields, saw 5\nSkipping line 89198: expected 2 fields, saw 5\nSkipping line 92499: expected 2 fields, saw 5\nSkipping line 92751: expected 2 fields, saw 5\nSkipping line 93689: expected 2 fields, saw 5\nSkipping line 94776: expected 2 fields, saw 5\nSkipping line 97334: expected 2 fields, saw 5\nSkipping line 102316: expected 2 fields, saw 5\nSkipping line 103421: expected 2 fields, saw 5\nSkipping line 106872: expected 2 fields, saw 5\nSkipping line 109363: expected 2 fields, saw 5\nSkipping line 110117: expected 2 fields, saw 5\nSkipping line 110465: expected 2 fields, saw 5\nSkipping line 113843: expected 2 fields, saw 5\nSkipping line 115634: expected 2 fields, saw 5\nSkipping line 121518: expected 2 fields, saw 5\nSkipping line 123692: expected 2 fields, saw 5\nSkipping line 124708: expected 2 fields, saw 5\nSkipping line 129608: expected 2 fields, saw 5\nSkipping line 133176: expected 2 fields, saw 5\nSkipping line 135532: expected 2 fields, saw 5\nSkipping line 138042: expected 2 fields, saw 5\nSkipping line 139485: expected 2 fields, saw 5\nSkipping line 140401: expected 2 fields, saw 5\nSkipping line 144093: expected 2 fields, saw 5\nSkipping line 149850: expected 2 fields, saw 5\nSkipping line 151831: expected 2 fields, saw 5\nSkipping line 158014: expected 2 fields, saw 5\nSkipping line 162047: expected 2 fields, saw 5\nSkipping line 164515: expected 2 fields, saw 5\nSkipping line 170313: expected 2 fields, saw 5\nSkipping line 171325: expected 2 fields, saw 5\nSkipping line 171424: expected 2 fields, saw 5\nSkipping line 175920: expected 2 fields, saw 5\nSkipping line 176210: expected 2 fields, saw 5\nSkipping line 183603: expected 2 fields, saw 5\nSkipping line 190264: expected 2 fields, saw 5\nSkipping line 191683: expected 2 fields, saw 5\nSkipping line 191988: expected 2 fields, saw 5\nSkipping line 195450: expected 2 fields, saw 5\nSkipping line 195754: expected 2 fields, saw 5\nSkipping line 197124: expected 2 fields, saw 5\nSkipping line 199263: expected 2 fields, saw 5\nSkipping line 202603: expected 2 fields, saw 5\nSkipping line 209960: expected 2 fields, saw 5\nSkipping line 213218: expected 2 fields, saw 5\nSkipping line 217060: expected 2 fields, saw 5\nSkipping line 220121: expected 2 fields, saw 5\nSkipping line 223518: expected 2 fields, saw 5\nSkipping line 226293: expected 2 fields, saw 5\nSkipping line 227035: expected 2 fields, saw
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Out[11]:

	password	strength
0	kzde5577	1
1	kino3434	1
2	visi7k1yr	1
3	megzy123	1
4	lamborghini1	1

In [12]: data['strength'].unique()

Out[12]: array([1, 2, 0], dtype=int64)

```
In [13]: data.isna().sum()
```

```
Out[13]: password    1  
          strength    0  
          dtype: int64
```

```
In [14]: data[data['password'].isnull()]
```

```
Out[14]:
```

	password	strength
367579	NaN	0

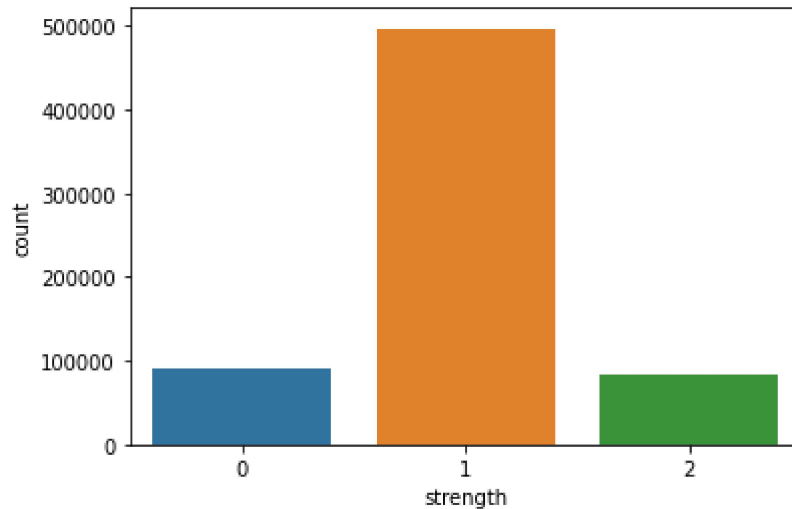
```
In [15]: data.dropna(inplace=True)
```

```
In [19]: data.isna().sum()
```

```
Out[19]: password    0  
          strength    0  
          dtype: int64
```

```
In [17]: sns.countplot(data['strength'])
```

```
Out[17]: <AxesSubplot:xlabel='strength', ylabel='count'>
```



```
In [20]: password_tuple=np.array(data)
```

```
In [21]: password_tuple
```

```
Out[21]: array([[ 'kzde5577', 1],  
                [ 'kino3434', 1],  
                [ 'visi7k1yr', 1],  
                ...,  
                [ '184520socram', 1],  
                [ 'marken22a', 1],  
                [ 'fxx4pw4g', 1]], dtype=object)
```

```
In [22]: import random  
         random.shuffle(password_tuple)
```

```
In [23]: x=[labels[0] for labels in password_tuple]  
         y=[labels[1] for labels in password_tuple]
```

In [24]: x

```
Out[24]: ['kzde5577',  
          'kino3434',  
          'kzde5577',  
          'kino3434',  
          'kzde5577',  
          'visi7k1yr',  
          'lamborghini1',  
          'visi7k1yr',  
          'megzy123',  
          'universe2908',  
          'visi7k1yr',  
          'lamborghini1',  
          '612035180tok',  
          'kino3434',  
          'lamborghini1',  
          'lamborghini1',  
          'asv5o9yu',  
          '612035180tok',  
          'kino3434',  
          '612035180tok']
```

