In [2]:

```
import numpy as np
import pandas as pd
```

In [5]:

```
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
```

In [6]:

```
df=pd.read_csv(r'C:\Users\Dhwaj Agrawal\Desktop\911.csv\911.csv ')
```

In [8]:

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 125312 entries, 0 to 125311
Data columns (total 9 columns):
 #   Column     Non-Null Count   Dtype  
---  ------     --------------   -----  
 0   lat        125312 non-null  float64
 1   lng        125312 non-null  float64
 2   desc       125312 non-null  object 
 3   zip        109010 non-null  float64
 4   title      125312 non-null  object 
 5   timeStamp  125312 non-null  object 
 6   twp        125259 non-null  object 
 7   addr       124689 non-null  object 
 8   e          125312 non-null  int64  
dtypes: float64(3), int64(1), object(5)
memory usage: 8.6+ MB
```

In [9]:

```
df.head()
```

Out[9]:

	lat	lng	desc	zip	title	timeStamp	twp	addr	e
0	40.297876	-75.581294	REINDEER CT & DEAD END; NEW HANOVER; Station ...	19525.0	EMS: BACK PAINS/INJURY	2015-12-10 17:40:00	NEW HANOVER	REINDEER CT & DEAD END	1
1	40.258061	-75.264680	BRIAR PATH & WHITEMARSH LN; HATFIELD TOWNSHIP...	19446.0	EMS: DIABETIC EMERGENCY	2015-12-10 17:40:00	HATFIELD TOWNSHIP	BRIAR PATH & WHITEMARSH LN	1
2	40.121182	-75.351975	HAWS AVE; NORRISTOWN; 2015-12-10 @ 14:39:21-St...	19401.0	Fire: GAS-ODOR/LEAK	2015-12-10 17:40:00	NORRISTOWN	HAWS AVE	1
3	40.116153	-75.343513	AIRY ST & SWEDE ST; NORRISTOWN; Station 308A;...	19401.0	EMS: CARDIAC EMERGENCY	2015-12-10 17:40:01	NORRISTOWN	AIRY ST & SWEDE ST	1
4	40.251492	-75.603350	CHERRYWOOD CT & DEAD END; LOWER POTTSGROVE; S...	NaN	EMS: DIZZINESS	2015-12-10 17:40:01	LOWER POTTSGROVE	CHERRYWOOD CT & DEAD END	1

In [10]:

```
df['zip'].value_counts().head(5)
```

Out[10]:

```
19401.0    8666
19464.0    8366
19403.0    6144
19446.0    5977
19406.0    4007
Name: zip, dtype: int64
```

In [11]:

```
df['twp'].value_counts().head(5)
```

Out[11]:

```
LOWER MERION    10752
ABINGTON         7577
NORRISTOWN       7292
UPPER MERION     6528
CHELTENHAM       5821
Name: twp, dtype: int64
```

In [14]:

```
len(df['title'].unique())
```

Out[14]:

```
118
```

In [15]:

```
df['title'].nunique()
```

Out[15]:

```
118
```

In [21]:

```
x=df['title'].iloc[0]
```

In [23]:

```
x.split(':')[0]
```

Out[23]:

```
'EMS'
```

In [25]:

```
df['Reason']= df['title'].apply(lambda title:title.split(':')[0])
```

In [26]:

```
df["Reason"]
```

Out[26]:

```
0             EMS
1             EMS
2            Fire
3             EMS
4             EMS
           ...   
125307    Traffic
125308       Fire
125309        EMS
125310    Traffic
125311    Traffic
Name: Reason, Length: 125312, dtype: object
```

In [27]:

```
df['Reason'].value_counts()
```

Out[27]:

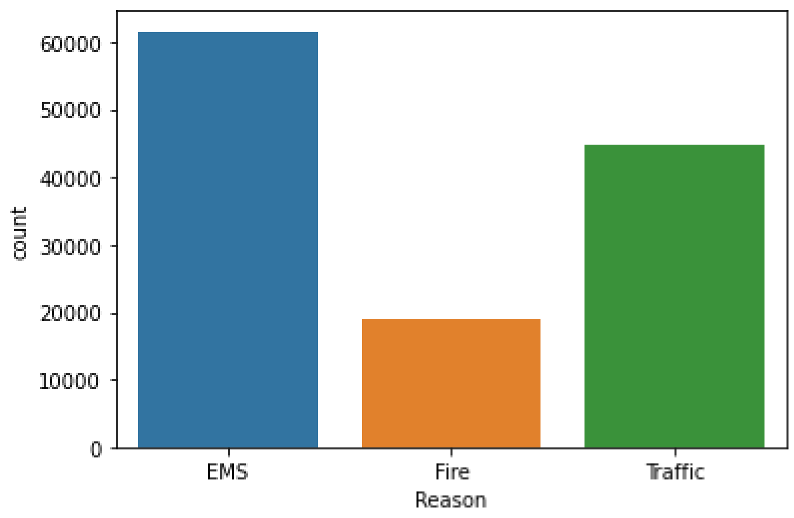
```
EMS        61563
Traffic    44898
Fire       18851
Name: Reason, dtype: int64
```

In [29]:

```
sns.countplot(x='Reason',data=df)
```

Out[29]:

```
<AxesSubplot:xlabel='Reason', ylabel='count'>
```



In [ ]: