

```
In [26]: import warnings
warnings.filterwarnings("ignore")
import pandas as pd
```

```
In [ ]:
```

```
In [2]: data=pd.read_csv("/home/placement/Downloads/movies.csv")
```

```
In [3]: data.describe()
```

```
Out[3]:
```

|       | srno         | year         | rating       | time         |
|-------|--------------|--------------|--------------|--------------|
| count | 49590.000000 | 49590.000000 | 10814.000000 | 45836.000000 |
| mean  | 24795.500000 | 2002.303428  | 3.451248     | 2628.445436  |
| std   | 14315.544261 | 12.534555    | 0.495601     | 1604.646265  |
| min   | 1.000000     | 1913.000000  | 1.400000     | 52.000000    |
| 25%   | 12398.250000 | 1999.000000  | 3.100000     | 1356.000000  |
| 50%   | 24795.500000 | 2007.000000  | 3.500000     | 2563.000000  |
| 75%   | 37192.750000 | 2010.000000  | 3.800000     | 2877.000000  |
| max   | 49590.000000 | 2014.000000  | 4.500000     | 28813.000000 |

```
In [4]: data.head()
```

```
Out[4]:
```

|   | srno | movie                | year | rating | time   |
|---|------|----------------------|------|--------|--------|
| 0 | 1    | The Nightmare Before | 1993 | 3.9    | 4568.0 |
| 1 | 2    | The Mummy            | 1932 | 3.5    | 4388.0 |
| 2 | 3    | Orphans of the Storm | 1921 | 3.2    | 9062.0 |
| 3 | 4    | The Object of Beauty | 1991 | 2.8    | 6150.0 |
| 4 | 5    | Night Tide           | 1963 | 2.8    | 5126.0 |

```
In [5]: data.isna().sum()
```

```
Out[5]: srno          0
        movie         0
        year         0
        rating    38776
        time       3754
        dtype: int64
```

```
In [7]: data1=data.fillna(data.median())
        data1
```

/tmp/ipykernel\_11660/4065881331.py:1: FutureWarning: The default value of numeric\_only in DataFrame.median is deprecated. In a future version, it will default to False. In addition, specifying 'numeric\_only=None' is deprecated. Select only valid columns or specify the value of numeric\_only to silence this warning.

```
data1=data.fillna(data.median())
```

```
Out[7]:
```

|       | srno  | movie   | year | rating | time   |
|-------|-------|---|------|--------|--------|
| 0     | 1     | The Nightmare Before                              | 1993 | 3.9    | 4568.0 |
| 1     | 2     | The Mummy   | 1932 | 3.5    | 4388.0 |
| 2     | 3     | Orphans of the Storm                              | 1921 | 3.2    | 9062.0 |
| 3     | 4     | The Object of Beauty                              | 1991 | 2.8    | 6150.0 |
| 4     | 5     | Night Tide  | 1963 | 2.8    | 5126.0 |
| ...   | ...   | ...   | ...  | ...    | ...    |
| 49585 | 49586 | Winter Wonderland                                 | 2013 | 2.8    | 1812.0 |
| 49586 | 49587 | Top Gear: Series 19: Africa Special               | 2013 | 3.5    | 6822.0 |
| 49587 | 49588 | Fireplace For Your Home: Crackling Fireplace w... | 2010 | 3.5    | 3610.0 |
| 49588 | 49589 | Kate Plus Ei8ht                                   | 2010 | 2.7    | 2563.0 |
| 49589 | 49590 | Kate Plus Ei8ht: Season 1                         | 2010 | 2.7    | 2563.0 |

49590 rows × 5 columns

```
In [8]: data.shape
```

```
Out[8]: (49590, 5)
```

```
In [9]: data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 49590 entries, 0 to 49589
Data columns (total 5 columns):
 #   Column  Non-Null Count  Dtype  
---  --
 0   srno    49590 non-null   int64  
 1   movie   49590 non-null   object  
 2   year    49590 non-null   int64  
 3   rating  10814 non-null   float64 
 4   time    45836 non-null   float64 
dtypes: float64(2), int64(2), object(1)
memory usage: 1.9+ MB
```

```
In [ ]: show lines in check type of columns
```

```
In [20]: data1=data.groupby(['year']).count()
```

```
In [21]: data1
```

```
Out[21]:
```

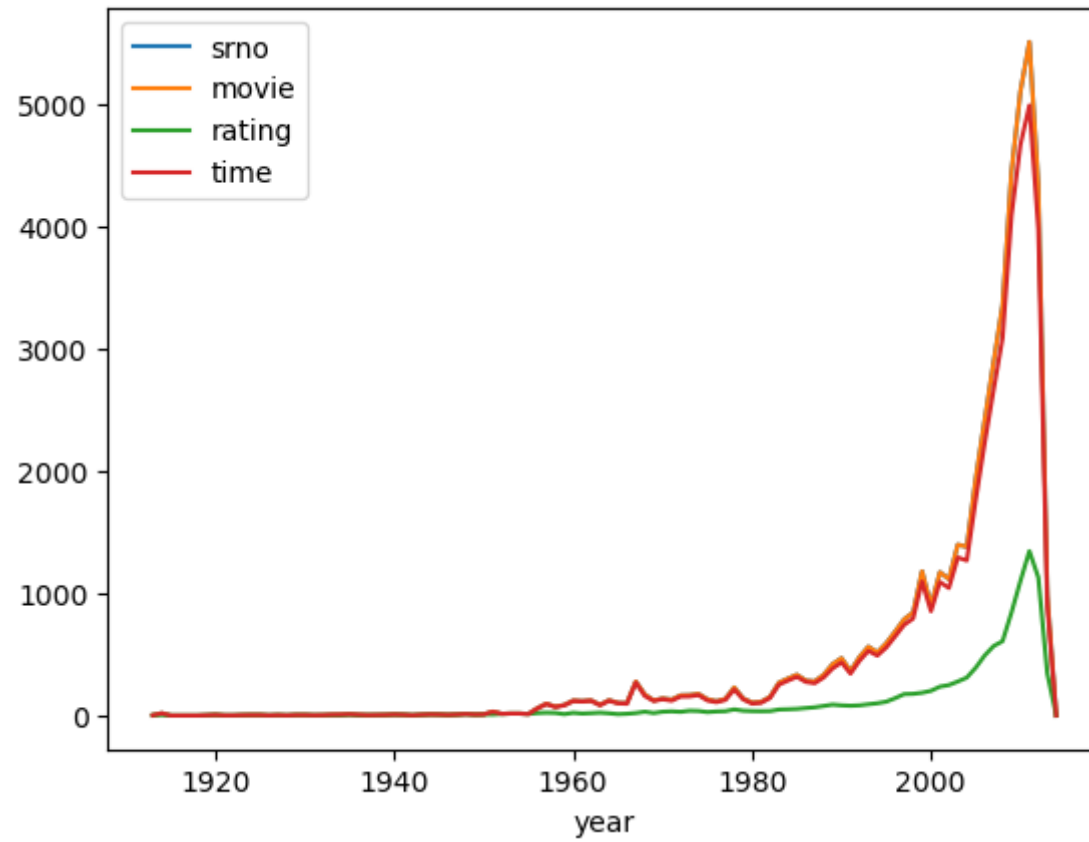
|      | srno | movie | rating | time |
|------|------|-------|--------|------|
| year |      |       |        |      |
| 1913 | 3    | 3     | 3      | 3    |
| 1914 | 20   | 20    | 5      | 18   |
| 1915 | 1    | 1     | 1      | 1    |
| 1916 | 1    | 1     | 1      | 1    |
| 1918 | 1    | 1     | 1      | 1    |
| ...  | ...  | ...   | ...    | ...  |
| 2010 | 5107 | 5107  | 1102   | 4671 |
| 2011 | 5511 | 5511  | 1346   | 4992 |
| 2012 | 4339 | 4339  | 1130   | 3978 |
| 2013 | 981  | 981   | 345    | 901  |
| 2014 | 1    | 1     | 1      | 1    |

101 rows × 4 columns

```
In [22]: data1.to_csv('movie.csv')
```

```
In [23]: data1.plot()
```

```
Out[23]: <Axes: xlabel='year'>
```



In [ ]:

In [ ]: