In [58]:
```
import numpy as np
import pandas as pd
import warnings
warnings.filterwarnings("ignore")
data=pd.read_csv("/home/placement/Desktop/analysis/movies.csv")
print(data)
```

```
       Unnamed: 0   srno                                              movie  \
0               0      1                           The Nightmare Before
1               1      2                                       Bhahubali
2               2      3                           Orphans of the Storm
3               3      4                           The Object of Beauty
4               4      5                                     Night Tide
...           ...    ...                                             ...
49585       49585  49586                              Winter Wonderland
49586       49586  49587          Top Gear: Series 19: Africa Special
49587       49587  49588  Fireplace For Your Home: Crackling Fireplace w...
49588       49588  49589                                Kate Plus Ei8ht
49589       49589  49590                    Kate Plus Ei8ht: Season 1

       year  rating    time
0      1993     3.9  4568.0
1      2017     3.5  4388.0
2      1921     3.2  9062.0
3      1991     2.8  6150.0
4      1963     2.8  5126.0
...     ...     ...     ...
49585  2013     2.8  1812.0
49586  2013     NaN  6822.0
49587  2010     NaN  3610.0
49588  2010     2.7     NaN
49589  2010     2.7     NaN

[49590 rows x 6 columns]
```

In [40]:
```
data.head(10)
```

Out[40]:

	Unnamed: 0	srno	movie	year	rating	time
0	0	1	The Nightmare Before	1993	3.9	4568.0
1	1	2	Bhahubali	2017	3.5	4388.0
2	2	3	Orphans of the Storm	1921	3.2	9062.0
3	3	4	The Object of Beauty	1991	2.8	6150.0
4	4	5	Night Tide	1963	2.8	5126.0
5	5	6	One Magic Christmas	1985	3.8	5333.0
6	6	7	Muriel's Wedding	1994	3.5	6323.0
7	7	8	Mother's Boys	1994	3.4	5733.0
8	8	9	Nosferatu: Original Version	1929	3.5	5651.0
9	9	10	Nick of Time	1995	3.4	5333.0

In [41]:
```
data.describe()
```

Out[41]:

	Unnamed: 0	srno	year	rating	time
count	49590.000000	49590.000000	49590.000000	10814.000000	45836.000000
mean	24794.500000	24795.500000	2002.305142	3.451248	2628.445436
std	14315.544261	14315.544261	12.530752	0.495601	1604.646265
min	0.000000	1.000000	1913.000000	1.400000	52.000000
25%	12397.250000	12398.250000	1999.000000	3.100000	1356.000000
50%	24794.500000	24795.500000	2007.000000	3.500000	2563.000000
75%	37191.750000	37192.750000	2010.000000	3.800000	2877.000000
max	49589.000000	49590.000000	2017.000000	4.500000	28813.000000

In [42]:
```
data.isna().sum()
```

Out[42]:
```
Unnamed: 0        0
srno              0
movie             0
year              0
rating        38776
time           3754
dtype: int64
```

In [43]:
```
data.shape
```

Out[43]:
```
(49590, 6)
```

In [44]:
```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 49590 entries, 0 to 49589
Data columns (total 6 columns):
 #   Column      Non-Null Count  Dtype  
---  ------      --------------  -----  
 0   Unnamed: 0  49590 non-null  int64  
 1   srno        49590 non-null  int64  
 2   movie       49590 non-null  object 
 3   year        49590 non-null  int64  
 4   rating      10814 non-null  float64
 5   time        45836 non-null  float64
dtypes: float64(2), int64(3), object(1)
memory usage: 2.3+ MB
```

In [45]:
```
data.sample()
```

Out[45]:

	Unnamed: 0	srno	movie	year	rating	time
27606	27606	27607	Frasier: Season 3: Frasier Loves Roz	1995	NaN	1362.0

In [46]:
```
data.index
```

Out[46]:
```
RangeIndex(start=0, stop=49590, step=1)
```

In [47]:
```
data.columns
```

Out[47]:
```
Index(['Unnamed: 0', 'srno', 'movie', 'year', 'rating', 'time'], dtype='object')
```

In [48]:
```
data.dtypes
```

Out[48]:
```
Unnamed: 0      int64
srno            int64
movie          object
year            int64
rating        float64
time          float64
dtype: object
```

In [49]:
```
data2=data.groupby(['year']).count()
```

In [50]:
```
data2
```

Out[50]:

year	Unnamed: 0	srno	movie	rating	time
1913	3	3	3	3	3
1914	20	20	20	5	18
1915	1	1	1	1	1
1916	1	1	1	1	1
1918	1	1	1	1	1
...	...	...	...	...	...
2011	5511	5511	5511	1346	4992
2012	4339	4339	4339	1130	3978
2013	981	981	981	345	901
2014	1	1	1	1	1
2017	1	1	1	1	1

102 rows × 5 columns

In [51]:
```
data
```

Out[51]:

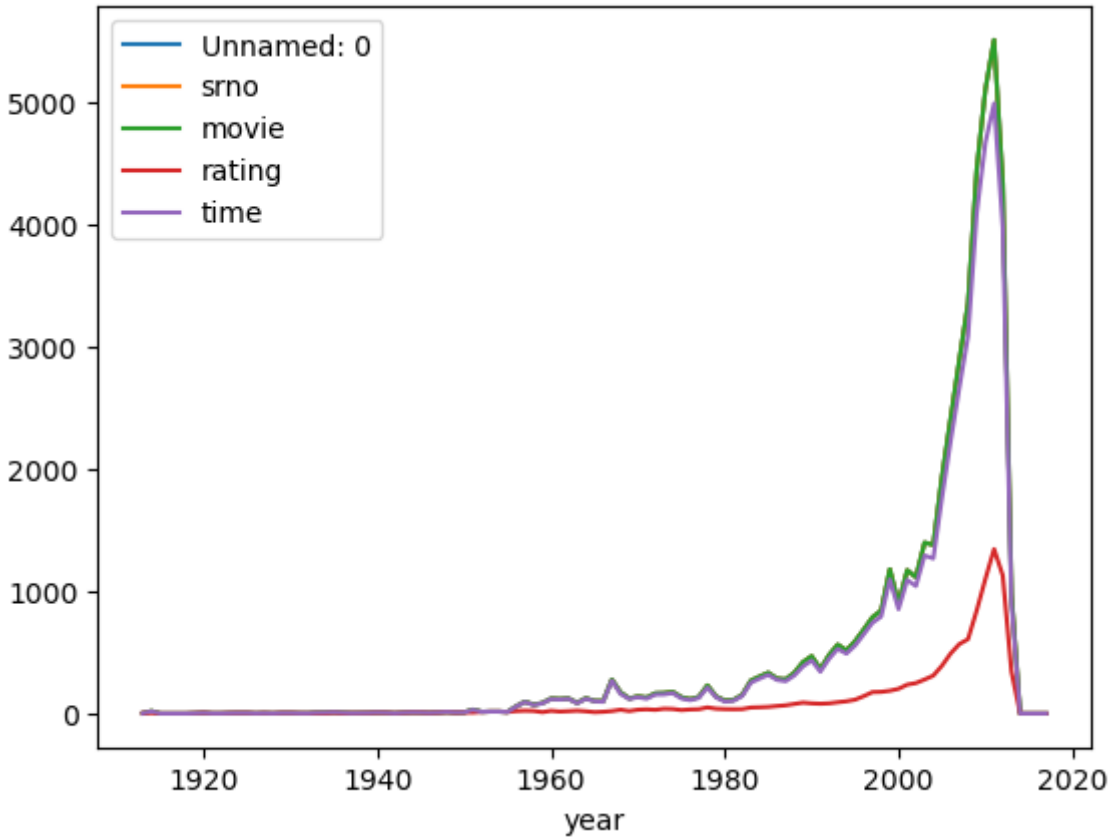
	Unnamed: 0	srno	movie	year	rating	time
0	0	1	The Nightmare Before	1993	3.9	4568.0
1	1	2	Bhahubali	2017	3.5	4388.0
2	2	3	Orphans of the Storm	1921	3.2	9062.0
3	3	4	The Object of Beauty	1991	2.8	6150.0
4	4	5	Night Tide	1963	2.8	5126.0
...	...	...	...	...	...	...
49585	49585	49586	Winter Wonderland	2013	2.8	1812.0
49586	49586	49587	Top Gear: Series 19: Africa Special	2013	NaN	6822.0
49587	49587	49588	Fireplace For Your Home: Crackling Fireplace w...	2010	NaN	3610.0
49588	49588	49589	Kate Plus Ei8ht	2010	2.7	NaN
49589	49589	49590	Kate Plus Ei8ht: Season 1	2010	2.7	NaN

49590 rows × 6 columns

In [34]:
```
data.to_csv("movies.csv")
```

In [53]:
```
data2.plot()
```

Out[53]: <Axes: xlabel='year'>



In [ ]:

In [ ]: