```
In [1]: import pandas as pd
In [2]: import numpy as np
In [3]: data=pd.read csv("/home/placement/Downloads/movies.csv")
In [4]:
         data.head(10)
Out[4]:
             srno
                                  movie year rating
                                                      time
                      The Nightmare Before 1993
                                                3.9 4568.0
           0
                1
                2
                             The Mummy 1932
                                                3.5 4388.0
                3
                       Orphans of the Storm 1921
           2
                                                3.2 9062.0
                       The Object of Beauty 1991
                                                2.8 6150.0
           3
                4
                               Night Tide 1963
                5
                                                2.8 5126.0
                      One Magic Christmas 1985
                6
                                                3.8 5333.0
                7
                          Muriel's Wedding 1994
                                                3.5 6323.0
                            Mother's Boys 1994
                8
                                                3.4 5733.0
                  Nosferatu: Original Version 1929
                                                3.5 5651.0
                                                3.4 5333.0
           9
               10
                             Nick of Time 1995
In [5]: data.isna().sum()
Out[5]: srno
                          0
         movie
                          0
         year
          rating
                     38776
         time
                       3754
         dtype: int64
In [6]: data1=data.fillna(data.median)
```

```
In [7]: data.shape
Out[7]: (49590, 5)
In [10]: datal=data.groupby(['year']).count()
         data1
               srno movie rating time
```

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year 3		00		·umg	
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	year				
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	1913	3	3	3	3
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	1914	20	20	5	18
1918 1 1 1 2010 5107 5107 1102 4671 2011 5511 5511 1346 4992 2012 4339 4339 1130 3978 2013 981 981 345 901	1915	1	1	1	1
2010 5107 5107 1102 4671 2011 5511 5511 1346 4992 2012 4339 4339 1130 3978 2013 981 981 345 901	1916	1	1	1	1
2010 5107 5107 1102 4671 2011 5511 5511 1346 4992 2012 4339 4339 1130 3978 2013 981 981 345 901	1918	1	1	1	1
2011 5511 5511 1346 4992 2012 4339 4339 1130 3978 2013 981 981 345 901					
2012 4339 4339 1130 3978 2013 981 981 345 901	2010	5107	5107	1102	4671
2013 981 981 345 901	2011	5511	5511	1346	4992
	2012	4339	4339	1130	3978
2014 1 1 1 1	2013	981	981	345	901
	2014	1	1	1	1

101 rows × 4 columns

Type $\it Markdown$ and LaTeX: $\it \alpha^2$

In [13]: data.to_csv("movies.csv")
 data

Out[13]:

srno		movie		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	NaN	6822.0
49587	49588	Fireplace For Your Home: Crackling Fireplace w	2010	NaN	3610.0
49588	49589	Kate Plus Ei8ht	2010	2.7	NaN
49589	49590	Kate Plus Ei8ht: Season 1	2010	2.7	NaN

49590 rows × 5 columns

In []: