```
In [1]: import pandas as pd
In [2]: data=pd.read_csv("/home/placement/Downloads/movies (1).csv")
In [3]: list(data.columns)
Out[3]: ['srno', 'movie', 'year', 'rating', 'time']
```

In	[4]:	<pre>data.groupby(['rating']).count()</pre>
----	------	---

srno movie year time

_			F 4 5	
- (1	ш	+	1 /1	
v	u		LT.	

			•	
rating				
1.4	4	4	4	0
1.5	2	2	2	0
1.6	10	10	10	4
1.7	14	14	14	10
1.8	18	18	18	18
1.9	33	33	33	25
2.0	24	24	24	22
2.1	74	74	74	72
2.2	53	53	53	53
2.3	99	99	99	99
2.4	109	109	109	109
2.5	156	156	156	152
2.6	163	163	163	157
2.7	234	234	234	230
2.8	316	316	316	305
2.9	386	386	386	356
3.0	481	481	481	447
3.1	545	545	545	501
3.2	592	592	592	518
3.3	677	677	677	544
3.4	698	698	698	563
3.5	802	802	802	562

		srno	movie	year	time				
	rating								
	3.6	967	967	967	588				
	3.7	1058	1058	1058	543				
	3.8	962	962	962	413				
	3.9	860	860	860	342				
	4.0	580	580	580	204				
	4.1	403	403	403	117				
	4.2	316	316	316	71				
	4.3	124	124	124	22				
n []:									
n [6]:	data['rati	na'l a						
out[6]:	37321	.7999	999999	996					
[n [7]:	data.d	descr	ibe()						
out[7]:			srno		year	rating		time	
	count	49590	0.000000	4959	0.000000	10814.000000	4583	6.000000	

mean 24795.500000 2002.303428 3.451248 2628.445436 std 14315.544261 12.534555 0.495601 1604.646265 1.000000 1913.000000 1.400000 52.000000 min **25**% 12398.250000 1999.000000 3.100000 1356.000000 **50**% 24795.500000 2007.000000 3.500000 2563.000000 **75%** 37192.750000 3.800000 2010.000000 2877.000000 max 49590.000000 2014.000000 4.500000 28813.000000

```
In [ ]:
In [10]: data1=data.loc[(data.time>=5000)]
In [11]: data1
Out[11]:
                                                    movie year rating
                                                                         time
                    srno
                                        Orphans of the Storm 1921
                2
                       3
                                                                   3.2 9062.0
                                        The Object of Beauty 1991
                                                                   2.8 6150.0
                3
                       4
                       5
                                                 Night Tide 1963
                                                                   2.8 5126.0
                                        One Magic Christmas 1985
                                                                   3.8 5333.0
                       7
                                           Muriel's Wedding 1994
                                                                   3.5 6323.0
            49564 49565
                                            American Addict 2013
                                                                   3.5 5377.0
                   49580 Underground: The Julian Assange Story 2012
                                                                   3.7 5665.0
            49579
                  49584
                                               Sunset Strip 2012
            49583
                                                                   3.0 5770.0
            49584
                  49585
                                                Silver Bells 2013
                                                                   3.5 5287.0
            49586 49587
                             Top Gear: Series 19: Africa Special 2013
                                                                  NaN 6822.0
           5899 rows × 5 columns
 In [ ]:
In [13]: data2=data.loc[(data.year==2000)&(data.time>5000)]
```

In [14]: data2

Out[14]:

		srno	movie	year	rating	time
	409	410	Believe	2000	3.3	5767.0
	416	417	The Prophecy 3: The Ascent	2000	3.4	5048.0
	430	431	Scream 3	2000	3.2	7013.0
	432	433	Holy Smoke	2000	3.0	6855.0
	437	438	Requiem for a Dream	2000	3.9	6087.0
3	2557	32558	Shaded Places	2000	2.9	5350.0
3	6229	36230	The Three Stooges	2000	3.7	5256.0
3	7333	37334	Les Miserables: Pt. 2	2000	NaN	5170.0
3	7336	37337	Les Miserables: Pt. 1	2000	NaN	5194.0
3	9493	39494	The Prophet's Game	2000	3.2	6486.0

137 rows × 5 columns

In [15]: data.head(1000)

Out[15]:

	srno	movie	year	rating	time
-) 1	The Nightmare Before	1993	3.9	4568.0
1	2	The Mummy	1932	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	5	Night Tide	1963	2.8	5126.0
995	996	The Replacement Suspect	2001	2.7	5419.0
996	997	Mickey's House of Villains	2002	3.7	4081.0
997	998	Operation Enduring Freedom	2002	3.3	3954.0
998	999	G-Men from Hell	2001	2.3	5904.0
999	1000	Monkey Trouble	1994	3.6	5767.0

1000 rows × 5 columns

In [16]: data.head(10)

Out[16]:

	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
5	6	One Magic Christmas	1985	3.8	5333.0
6	7	Muriel's Wedding	1994	3.5	6323.0
7	8	Mother's Boys	1994	3.4	5733.0
8	9	Nosferatu: Original Version	1929	3.5	5651.0
9	10	Nick of Time	1995	3.4	5333.0

In [17]: data.head(3)

Out[17]:

	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

In [18]: data.tail(50)

Out[18]:

	srno	movie	year	rating	time
49540	49541	Life With Boys: Season 1: This Time the Proble	2011	NaN	1368.0
49541	49542	Life With Boys: Season 1: In the Principal's O	2011	NaN	1368.0
49542	49543	El Fuente: 5994 MP	2013	3.5	471.0
49543	49544	Life With Boys: Season 1: Monkey Talk with Boys	2011	NaN	1368.0
49544	49545	El Fuente: 50 MP	2013	3.3	465.0
49545	49546	Bo Burnham: what.	2013	4.1	3614.0
49546	49547	Life With Boys: Season 1: A Perfect Life with	2011	NaN	1368.0
49547	49548	Life With Boys: Season 1: Wrestling with Boys	2011	NaN	1369.0
49548	49549	Life With Boys: Season 1	2011	4.1	NaN
49549	49550	El Fuente: 30 MP	2013	3.3	471.0
49550	49551	El Fuente: 2997 MP	2013	3.2	471.0
49551	49552	El Fuente: 25 MP	2013	3.3	465.0
49552	49553	El Fuente: 24 MP	2013	3.5	484.0
49553	49554	Max Steel	2013	4.1	NaN
49554	49555	Saving Santa	2013	3.8	5038.0
49555	49556	Lilyhammer: Season 1 (Recap)	2013	4.2	194.0
49556	49557	Shinobi Girl	2012	2.0	NaN
49557	49558	GLOW: The Story of the Gorgeous Ladies of Wres	2012	3.7	4593.0
49558	49559	Mitt (Trailer)	2013	3.0	138.0
49559	49560	My Hope America with Billy Graham: The Cross	2013	NaN	1706.0
49560	49561	The Square (Trailer)	2014	3.6	154.0
49561	49562	My Hope America with Billy Graham	2013	3.9	NaN
49562	49563	My Hope America with Billy Graham: Defining Mo	2013	NaN	1791.0

	srno	movie	year	rating	time
49563	49564	My Hope America with Billy Graham: Lose to Gain	2013	NaN	1400.0
49564	49565	American Addict	2013	3.5	5377.0
49565	49566	My Hope America with Billy Graham	2013	3.9	NaN
49566	49567	El Fuente: 2997 MP10	2013	2.7	470.0
49567	49568	El Fuente: 25 MP10	2013	2.9	464.0
49568	49569	El Fuente: 24 MP10	2013	2.8	484.0
49569	49570	El Fuente: 23976 MP10	2013	2.9	484.0
49570	49571	The Short Game (Trailer)	2013	4.1	156.0
49571	49572	El Fuente: 5994 MP10	2013	2.8	471.0
49572	49573	El Fuente: 50 MP10	2013	2.9	464.0
49573	49574	El Fuente: 30 MP10	2013	2.8	470.0
49574	49575	Greg Fitzsimmons: Life on Stage	2013	3.3	3671.0
49575	49576	Dave Foley: Relatively Well	2013	3.2	3446.0
49576	49577	Barbie: Life in the Dreamhouse: Barbie Life in	2013	NaN	1390.0
49577	49578	Barbie: Life in the Dreamhouse: Barbie Life in	2013	NaN	1458.0
49578	49579	Transformers Prime Beast Hunters: Predacons Ri	2013	4.2	3950.0
49579	49580	Underground: The Julian Assange Story	2012	3.7	5665.0
49580	49581	Curious George: A Very Monkey Christmas	2009	3.8	3438.0
49581	49582	Mumfie's White Christmas	1996	2.4	1350.0
49582	49583	Lady Gaga & The Muppets' Holiday Spectacular	2013	3.1	3496.0
49583	49584	Sunset Strip	2012	3.0	5770.0
49584	49585	Silver Bells	2013	3.5	5287.0
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

....

In [21]: data3=data.loc[(data.rating>=4)&(data.year>=2000)&(data.year<=2010)] data3

Out[21]:

	srno	movie	year	rating	time	
484	485	Coming to Light: Edward S. Curtis and the Nort	2000	4.0	5027.0	
560	561	The Emperor's New Groove	2000	4.0	4703.0	
816	817	Dil Chahta Hai	2001	4.0	11110.0	
865	866	Black Hawk Down	2001	4.0	8660.0	
920	921	We Were Soldiers	2002	4.0	8309.0	
48784	48785	King Tut Unwrapped	2010	4.0	NaN	
48854	48855	Pit Bulls & Parolees	2009	4.3	NaN	
48874	48875	Brew Masters	2010	4.1	NaN	
49025	49026	Cake Boss: Next Great Baker	2010	4.1	NaN	
49028	49029	Police Women of Dallas	2010	4.0	NaN	

725 rows × 5 columns

```
In [23]: data.iloc[5]
```

Out[23]: srno

srno 6
movie One Magic Christmas
year 1985
rating 3.8
time 5333.0

Name: 5, dtype: object

In [25]: datat=data.sort_values('time')
 datat

Out[25]:

	srno	movie	year	rating	time
40150	40151	Trailer: Pain	2012	3.6	52.0
41081	41082	Trailer: Get to Work	2012	3.3	55.0
41082	41083	Trailer: Give and Take	2012	3.3	66.0
43166	43167	Trailer: Emperor	2013	3.1	67.0
43330	43331	Trailer: Blood Angel	2013	4.2	69.0
49556	49557	Shinobi Girl	2012	2.0	NaN
49561	49562	My Hope America with Billy Graham	2013	3.9	NaN
49565	49566	My Hope America with Billy Graham	2013	3.9	NaN
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 [26]: datar=data.sort values('rating')
           datar
Out[26]:
                                                              movie year rating
                                                                                    time
                     srno
            40934 40935
                                                              Lagegi 2007
                                                                                    NaN
                                                                              1.4
            42115 42116
                                                   Sun Yaar Chill Maar 2007
                                                                              1.4
                                                                                    NaN
            40826 40827
                                                              Lagegi 2007
                                                                              1.4
                                                                                    NaN
             42160 42161
                                                   Sun Yaar Chill Maar 2007
                                                                              1.4
                                                                                    NaN
                                               Meri Toh Lag Gayi Naukri 2011
             41396 41397
                                                                              1.5
                                                                                    NaN
            49563 49564 My Hope America with Billy Graham: Lose to Gain 2013
                                                                             NaN 1400.0
             49576 49577
                             Barbie: Life in the Dreamhouse: Barbie Life in... 2013
                                                                             NaN 1390.0
             49577 49578
                             Barbie: Life in the Dreamhouse: Barbie Life in... 2013
                                                                             NaN 1458.0
                                       Top Gear: Series 19: Africa Special 2013
                                                                             NaN 6822.0
             49586 49587
                           Fireplace For Your Home: Crackling Fireplace w... 2010
                                                                             NaN 3610.0
             49587 49588
           49590 rows × 5 columns
 In [ ]:
 In [ ]:
In [33]:
 In [ ]:
 In [ ]:
 In [ ]:
```

Tu []:	
In []:	
In []:	