

```
In [4]: # Extract adventure movies and sort them year-wise.  
  
import pandas as pd  
df=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv",index_col='Title')  
x=df[df['Genre'].str.contains('Adventure')]  
x  
x.sort_values(by=['Year'],ascending=False)
```

Out[4]:

	Rank	Genre	Description	Director	Actors	Year	Runtime (Minutes)
Title							
Inferno	150	Action,Adventure,Crime	When Robert Langdon wakes up in an Italian hos...	Ron Howard	Tom Hanks, Felicity Jones, Irrfan Khan, Ben Fo...	2016	121
The BFG	151	Adventure,Family,Fantasy	An orphan little girl befriends a benevolent g...	Steven Spielberg	Mark Rylance, Ruby Barnhill, Penelope Wilton,J...	2016	117
Grimsby	598	Action,Adventure,Comedy	A new assignment forces a top spy to team up w...	Louis Leterrier	Sacha Baron Cohen, Mark Strong, Rebel Wilson,F...	2016	83
Kung Fu Panda 3	604	Animation,Action,Adventure	Continuing his "legendary adventures of awesom...	Alessandro Carloni	Jack Black, Bryan Cranston, Dustin Hoffman, An...	2016	95
Beyond the Gates	173	Adventure,Horror	Two estranged brothers reunite at their missin...	Jackson Stewart	Graham Skipper, Chase Williamson, Brea Grant,B...	2016	84
...
Pirates of the Caribbean: Dead Man's Chest	79	Action,Adventure,Fantasy	Jack Sparrow races to recover the heart of Dav...	Gore Verbinski	Johnny Depp, Orlando Bloom, Keira Knightley, J...	2006	151
Apocalypto	233	Action,Adventure,Drama	As the Mayan kingdom faces its decline, the ru...	Mel Gibson	Gerardo Taracena, Raoul Max Trujillo, Dalia He...	2006	139
Mission: Impossible III	870	Action,Adventure,Thriller	Agent Ethan Hunt comes into conflict with a da...	J.J. Abrams	Tom Cruise, Michelle Monaghan, Ving Rhames, Ph...	2006	126

	Rank	Genre	Description	Director	Actors	Year	Runtime (Minutes)
Title							
Rescue Dawn	797	Adventure,Biography,Drama	A U.S. fighter pilot's epic struggle of surviv...	Werner Herzog	Christian Bale, Steve Zahn, Jeremy Davies, Zac...	2006	120
Silent Hill	446	Adventure,Horror,Mystery	A woman, Rose, goes in search for her adopted ...	Christophe Gans	Radha Mitchell, Laurie Holden, Sean Bean, Debor...	2006	125

259 rows × 11 columns

In [5]: *# Extract Horror movies and sort them by rating.*

```
q= pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv",index_col='Title')
x=q[q['Genre'].str.contains("Horror")]
x.sort_values(by=['Rating'],ascending=False)
x
```

Out[5]:

	Rank	Genre	Description	Director	Actors	Year	Runtime (Minutes)	Rating
Title								
Split	3	Horror,Thriller	Three girls are kidnapped by a man with a diag...	M. Night Shyamalan	James McAvoy, Anya Taylor-Joy, Haley Lu Richar...	2016	117	7
Hounds of Love	23	Crime,Drama,Horror	A cold-blooded predatory couple while cruising...	Ben Young	Emma Booth, Ashleigh Cummings, Stephen Curry,S...	2016	108	6
Dead Awake	28	Horror,Thriller	A young woman must save herself and her friend...	Phillip Guzman	Jocelin Donahue, Jesse Bradford, Jesse Borrego...	2016	99	4
Resident Evil: The Final Chapter	35	Action,Horror,Sci-Fi	Alice returns to where the nightmare began: Th...	Paul W.S. Anderson	Milla Jovovich, Iain Glen, Ali Larter, Shawn R...	2016	107	5
Don't Fuck in the Woods	43	Horror	A group of friends are going on a camping trip...	Shawn Burkett	Brittany Blanton, Ayse Howard, Roman Jossart,N...	2016	73	2
...
Scream 4	974	Horror,Mystery	Ten years have passed, and Sidney Prescott, wh...	Wes Craven	Neve Campbell, Courteney Cox, David Arquette, ...	2011	111	6
Final Destination 5	987	Horror,Thriller	Survivors of a suspension-bridge collapse lear...	Steven Quale	Nicholas D'Agosto, Emma Bell, Arlen Escarpeta,...	2011	92	5
Martyrs	989	Horror	A young woman's quest for revenge against the ...	Pascal Laugier	Morjana Alaoui, Mylène Jampanoï, Catherine Bég...	2008	99	7

	Rank		Genre	Description	Director	Actors	Year	Runtime (Minutes)	Rating
Title									
Resident Evil: Afterlife	994	Action,Adventure,Horror		While still out to destroy the evil Umbrella C...	Paul W.S. Anderson	Milla Jovovich, Ali Larter, Wentworth Miller,K...	2010	97	5
Hostel: Part II	997		Horror	Three American college students studying abroa...	Eli Roth	Lauren German, Heather Matarazzo, Bijou Philli...	2007	94	5

119 rows × 11 columns

In [7]: *# Calculate year-wise Revenue from movies.*

```
w=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv",index_col='Title')
x=w['Revenue (Millions)'].mean()
w['Revenue (Millions)'].fillna(x,inplace=True)
a=w['Year'].unique()
for i in a:
    print("revenue for year ",i,"is ",round(w.loc[w.Year==i]['Revenue (Millions)'].sum(),
revenue for year 2014 is 8329.23
revenue for year 2012 is 6910.29
revenue for year 2016 is 18843.64
revenue for year 2015 is 10015.51
revenue for year 2007 is 4638.06
revenue for year 2011 is 5514.92
revenue for year 2008 is 5136.18
revenue for year 2006 is 3790.37
revenue for year 2009 is 5624.09
revenue for year 2010 is 6238.52
revenue for year 2013 is 7915.59
```

In [8]: *# Extract titles of movies of 'vin diesel' with year.*

```
q= pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv")
x=q[q['Actors'].str.contains("Vin Diesel")]
x[['Title','Year']]
```

Out[8]:

	Title	Year
0	Guardians of the Galaxy	2014
84	Furious Seven	2015
134	Furious 6	2013
319	Fast Five	2011
325	The Last Witch Hunter	2015
340	Fast & Furious	2009
944	Riddick	2013

In [9]: *# Calculate no. of movies in genre:- Action , Adventure , Sci-Fi , Comedy & Romance.*

```
import pandas as pd
x=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv",index_col='Title')
c=['Action' , 'Adventure' , 'Sci-Fi' , 'Comedy' , 'Romance']
for i in c:
    a=x[x['Genre'].str.contains(i)]
    v=[]
    v.append(a.count())
    print("The total" ,i,"containing movies are : ",v[0][0])
```

The total Action containing movies are : 303
 The total Adventure containing movies are : 259
 The total Sci-Fi containing movies are : 120
 The total Comedy containing movies are : 279
 The total Romance containing movies are : 141

In [10]: *# Movie name with lowest votes in 2016.*

```
import pandas as pd
y=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv",index_col='Title')
yf=y['Votes']
c=yf.min()
d=y[y["Votes"]==c].index
print(c,' - ',d[0])
```

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In [11]: *# Extract movie details with average runtime.*

```
import pandas as pd
a=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv")
y=a['Runtime (Minutes)'].mean()
print("Mean : ",y)
```

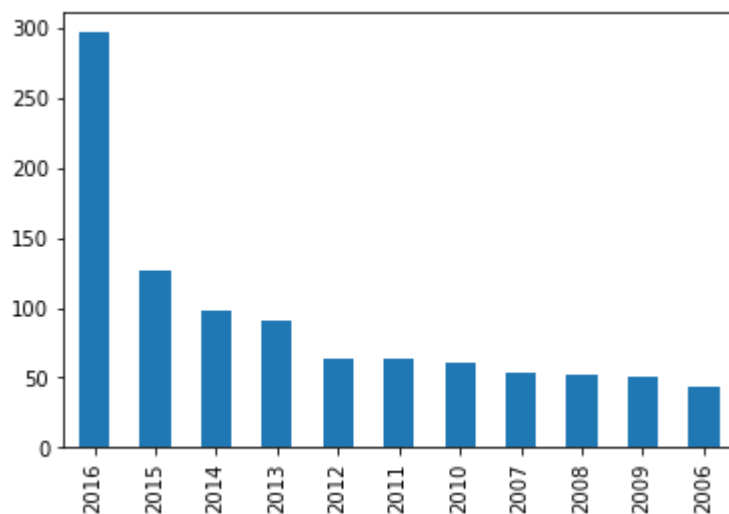
Mean : 113.172

In [12]: *# Plot a graph for no. of movies year wise.*

```
import pandas as pd
import matplotlib as plt
```

```
a=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv")
x=a["Year"].value_counts().plot.bar()
x
```

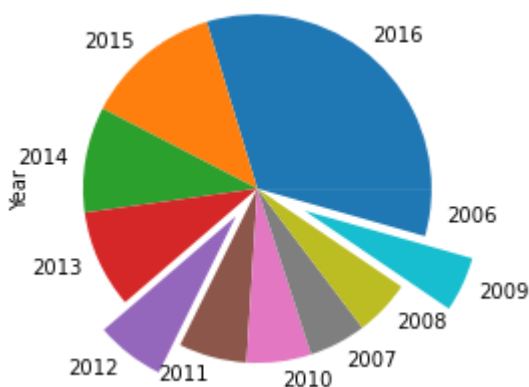
Out[12]: <AxesSubplot:>



In [13]: # PIE CHART.

```
import pandas as pd
import matplotlib as plt
a=pd.read_csv("C:/Users/cdac/Downloads/IMDB-Movie-Data.csv")
x=a["Year"].value_counts().plot.pie(explode=(0,0,0,0,0.2,0,0,0,0,0.3,0))
x
```

Out[13]: <AxesSubplot:ylabel='Year'>



In []: