

```
In [4]: # Import Libraries

import pandas as pd
import seaborn as sns
import numpy as np
from scipy.stats import f_oneway

import matplotlib
import matplotlib.pyplot as plt
plt.style.use('ggplot')
from matplotlib.pyplot import figure
from mpl_toolkits.mplot3d import Axes3D

%matplotlib inline
matplotlib.rcParams['figure.figsize'] = (12,8) # Adjusts the configuration of the p

#Read in the Data

df = pd.read_csv(r'C:\Users\Evan Blair\Downloads\movies.csv')
```

```
In [6]: # Let's Look at the data

df.head()
```

Out[6]:

	name	rating	genre	year	released	score	votes	director	writer
0	The Shining	R	Drama	1980	June 13, 1980 (United States)	8.4	927000.0	Stanley Kubrick	Stephen King
1	The Blue Lagoon	R	Adventure	1980	July 2, 1980 (United States)	5.8	65000.0	Randal Kleiser	Henry De Vere Stacpoole
2	Star Wars: Episode V - The Empire Strikes Back	PG	Action	1980	June 20, 1980 (United States)	8.7	1200000.0	Irvin Kershner	Leigh Brackett
3	Airplane!	PG	Comedy	1980	July 2, 1980 (United States)	7.7	221000.0	Jim Abrahams	Jim Abrahams
4	Caddyshack	R	Comedy	1980	July 25, 1980 (United States)	7.3	108000.0	Harold Ramis	Brian Doyle-Murray

```
In [8]: # Lets look if there is any missing data
```

```
for col in df.columns:
    percent_missing = np.mean(df[col].isnull())
    print('{ } - { }%' .format(col, percent_missing))
```

```
name - 0.0%
rating - 0.010041731872717789%
genre - 0.0%
year - 0.0%
released - 0.0002608242044861763%
score - 0.0003912363067292645%
votes - 0.0003912363067292645%
director - 0.0%
writer - 0.0003912363067292645%
star - 0.00013041210224308815%
country - 0.0003912363067292645%
budget - 0.2831246739697444%
gross - 0.02464788732394366%
company - 0.002217005738132499%
runtime - 0.0005216484089723526%
```

In [10]: *# Lets remove the missing data*

```
df=df.dropna()
```

In [12]: *# Looking at the Data types for our columns*

```
df.dtypes
```

Out[12]:

name	object
rating	object
genre	object
year	int64
released	object
score	float64
votes	float64
director	object
writer	object
star	object
country	object
budget	float64
gross	float64
company	object
runtime	float64
dtype:	object

In [14]: *# Changing data type of budget, gross, votes, and runtime to intiger values to remo*

```
df['budget'] = df['budget'].astype('int64')
df['gross'] = df['gross'].astype('int64')
df['votes'] = df['votes'].astype('int64')
df['runtime'] = df['runtime'].astype('int64')
```

In [16]:

```
df.head()
```

Out[16]:

	name	rating	genre	year	released	score	votes	director	writer	
0	The Shining	R	Drama	1980	June 13, 1980 (United States)	8.4	927000	Stanley Kubrick	Stephen King	Ni
1	The Blue Lagoon	R	Adventure	1980	July 2, 1980 (United States)	5.8	65000	Randal Kleiser	Henry De Vere Stacpoole	
2	Star Wars: Episode V - The Empire Strikes Back	PG	Action	1980	June 20, 1980 (United States)	8.7	1200000	Irvin Kershner	Leigh Brackett	
3	Airplane!	PG	Comedy	1980	July 2, 1980 (United States)	7.7	221000	Jim Abrahams	Jim Abrahams	
4	Caddyshack	R	Comedy	1980	July 25, 1980 (United States)	7.3	108000	Harold Ramis	Brian Doyle-Murray	

In [18]:

```
# Year column and released column are different years
# Create a column to fix the incorrect year column

df['yearcorrect'] = df['released'].astype(str).str.split().str[2]
```

In [220...]

```
df.head()
```

Out[220...

	name	rating	genre	year	released	score	votes	director	writer	
0	The Shining	R	Drama	1980	June 13, 1980 (United States)	8.4	927000	Stanley Kubrick	Stephen King	Ni
1	The Blue Lagoon	R	Adventure	1980	July 2, 1980 (United States)	5.8	65000	Randal Kleiser	Henry De Vere Stacpoole	
2	Star Wars: Episode V - The Empire Strikes Back	PG	Action	1980	June 20, 1980 (United States)	8.7	1200000	Irvin Kershner	Leigh Brackett	
3	Airplane!	PG	Comedy	1980	July 2, 1980 (United States)	7.7	221000	Jim Abrahams	Jim Abrahams	
4	Caddyshack	R	Comedy	1980	July 25, 1980 (United States)	7.3	108000	Harold Ramis	Brian Doyle-Murray	

In [251...

```
# Sorting by highest grossing movies

df.head().sort_values(by=['gross'], inplace=False, ascending=False)
```

Out[251...

	name	rating	genre	year	released	score	votes	director	writer
2	Star Wars: Episode V - The Empire Strikes Back	PG	Action	1980	June 20, 1980 (United States)	8.7	1200000	Irvin Kershner	Leigh Brackett
3	Airplane!	PG	Comedy	1980	July 2, 1980 (United States)	7.7	221000	Jim Abrahams	Jim Abrahams
1	The Blue Lagoon	R	Adventure	1980	July 2, 1980 (United States)	5.8	65000	Randal Kleiser	Henry De Vere Stacpoole
0	The Shining	R	Drama	1980	June 13, 1980 (United States)	8.4	927000	Stanley Kubrick	Stephen King
4	Caddyshack	R	Comedy	1980	July 25, 1980 (United States)	7.3	108000	Harold Ramis	Brian Doyle-Murray

In [223...

```
# Viewing the full dataset
pd.set_option('display.max_rows', None)
```

In [261...

```
# Looking for duplicates to remove
df['company'].drop_duplicates().sort_values(ascending=False).head()
df['name'].drop_duplicates().sort_values(ascending=False).head()
```

Out[261...

4722 Aon Flux
4761 xXx: State of the Union
7112 xXx: Return of Xander Cage
4083 xXx
3503 eXistenZ
Name: name, dtype: object

In [259...

```
#Looking at companies that have the highest grossing movies
df[['gross', 'company', 'name']].sort_values(by=['gross'],ascending=False).head()
```

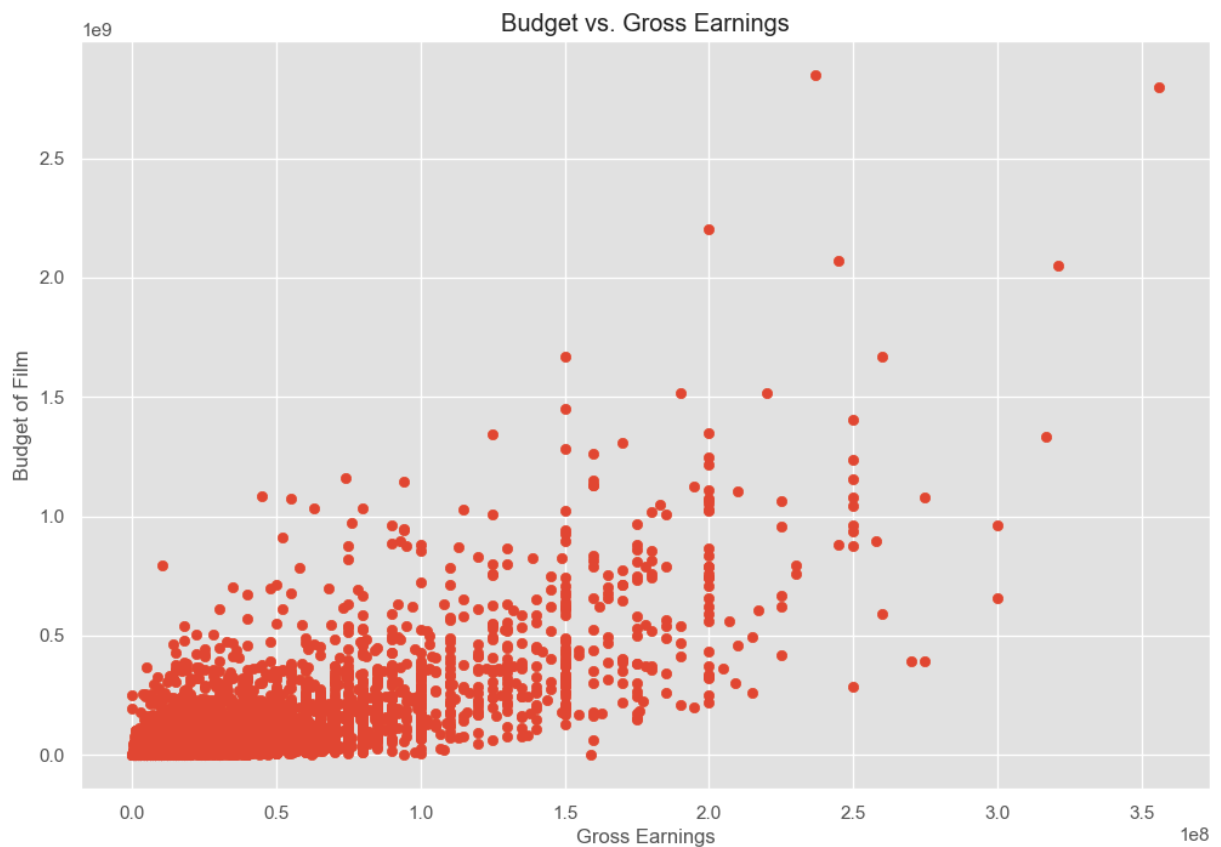
Out[259...

	gross	company	name
5445	2847246203	Twentieth Century Fox	Avatar
7445	2797501328	Marvel Studios	Avengers: Endgame
3045	2201647264	Twentieth Century Fox	Titanic
6663	2069521700	Lucasfilm	Star Wars: Episode VII - The Force Awakens
7244	2048359754	Marvel Studios	Avengers: Infinity War

In [226... *# Testing budget correlation to gross earnings*In [230... *# Making a scatter plot for budget vs gross*

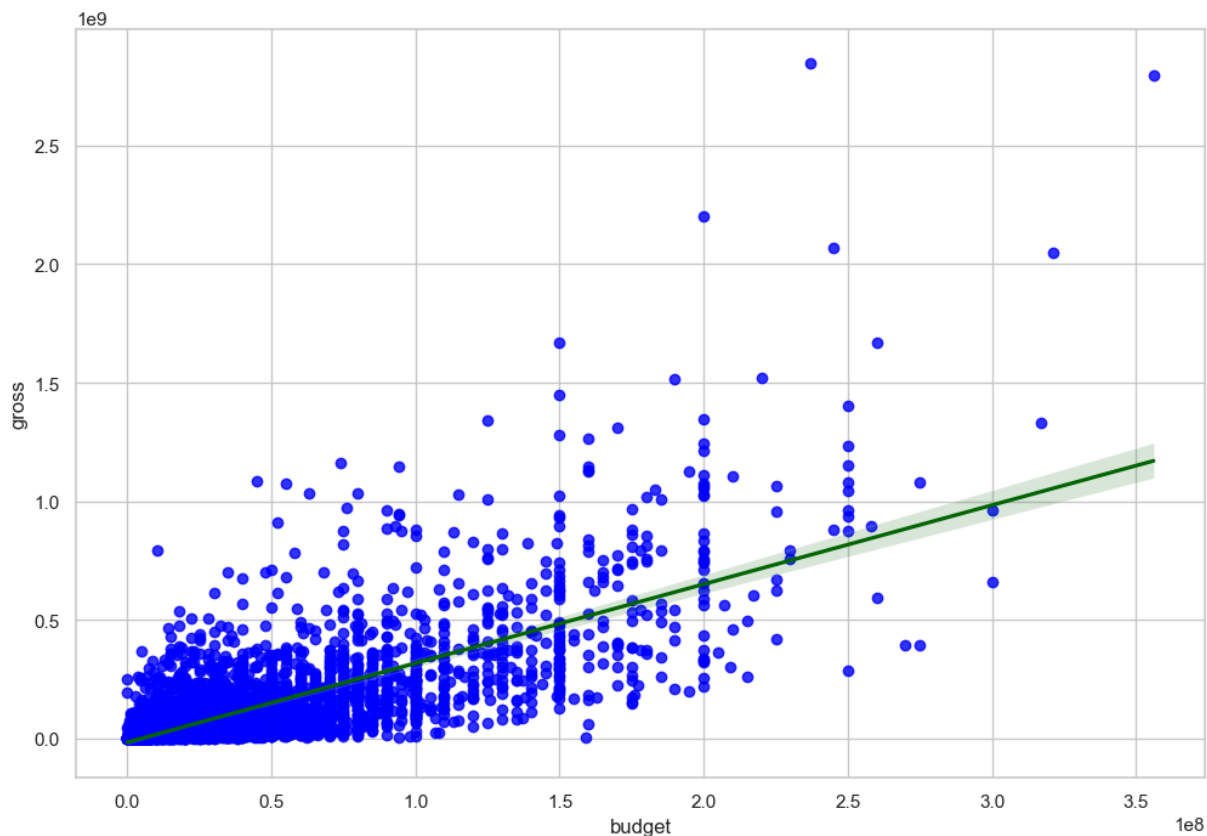
```
plt.scatter(x=df['budget'], y =df['gross'])
plt.title('Budget vs. Gross Earnings')

plt.xlabel('Gross Earnings')
plt.ylabel('Budget of Film')
plt.show()
```

In [234... *# Plot the budget versus gross using seaborn*

```
sns.set(style= 'whitegrid')
sns.regplot(x='budget', y='gross', data = df, scatter_kws={"color": "blue"}, line_k
```

Out[234... <Axes: xlabel='budget', ylabel='gross'>



In [236... *# Looking at correlation*

```
df.corr(method='pearson', numeric_only = True) #Can use pearson, kendal, spearman
```

Out[236...

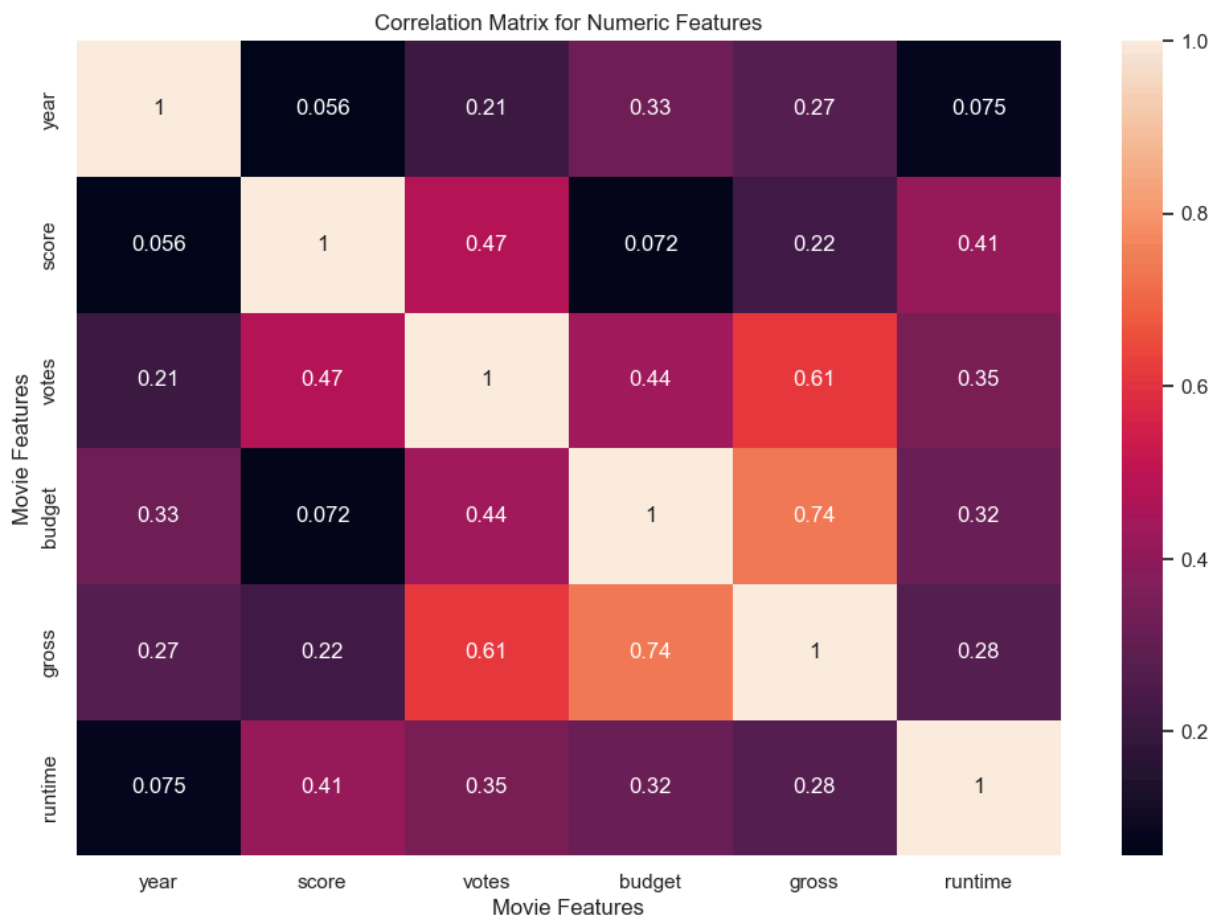
	year	score	votes	budget	gross	runtime
year	1.000000	0.056386	0.206021	0.327722	0.274321	0.075077
score	0.056386	1.000000	0.474256	0.072001	0.222556	0.414068
votes	0.206021	0.474256	1.000000	0.439675	0.614751	0.352303
budget	0.327722	0.072001	0.439675	1.000000	0.740247	0.318695
gross	0.274321	0.222556	0.614751	0.740247	1.000000	0.275796
runtime	0.075077	0.414068	0.352303	0.318695	0.275796	1.000000

In [238... *# High correlation between budget and gross earnings*

In [240... *# Lets make a visulization of the correlating numeric values*

```
correlation_matrix = df.corr(method='pearson', numeric_only=True)

sns.heatmap(correlation_matrix, annot=True)
plt.title('Correlation Matrix for Numeric Features')
plt.xlabel('Movie Features')
plt.ylabel('Movie Features')
plt.show()
```



In [242...

```
# Finding percentage of companies occurrence in the top 50 grossing movies
```

```
df_sortedgross = df.sort_values(by=['gross'],ascending=False)
```

```
Top_50_gross = df_sortedgross.head(50)
```

```
company_name = Top_50_gross['company'].tolist()
```

```
company_counts = Top_50_gross['company'].value_counts()
```

```
total_company = company_counts.sum()
```

```
company_percentages = (company_counts / total_company) * 100
```

```
for company, percentage in company_percentages.items():
    print(f'{company}: {percentage:.2f}%')
```


Walt Disney Pictures: 24.00%
Marvel Studios: 14.00%
Universal Pictures: 12.00%
Warner Bros.: 12.00%
Lucasfilm: 6.00%
Twentieth Century Fox: 4.00%
Walt Disney Animation Studios: 4.00%
Illumination Entertainment: 4.00%
Paramount Pictures: 4.00%
Metro-Goldwyn-Mayer (MGM): 4.00%
Pixar Animation Studios: 4.00%
Mandeville Films: 2.00%
New Line Cinema: 2.00%
Columbia Pictures: 2.00%
Fairview Entertainment: 2.00%

In [244...

```
# Looking at the most profitable companies of the last decade (2010-2020)

filtered_df = df[df['year'] > 2010]
df_sortedgrossdecade = filtered_df.sort_values(by=['gross'], ascending=False)

company_name = df_sortedgrossdecade['company'].tolist()
company_counts = df_sortedgrossdecade['company'].value_counts()
total_company = company_counts.sum()
company_percentages = (company_counts / total_company) * 100

for company, percentage in company_percentages.items():
    print(f'{company}: {percentage:.2f}%')
```

Universal Pictures: 5.45%
Columbia Pictures: 5.23%
Warner Bros.: 4.35%
Paramount Pictures: 4.35%
Twentieth Century Fox: 3.24%
Summit Entertainment: 3.17%
Walt Disney Pictures: 2.36%
Lionsgate: 2.21%
New Line Cinema: 2.14%
Fox 2000 Pictures: 1.69%
Screen Gems: 1.40%
Focus Features: 1.18%
CBS Films: 1.11%
Metro-Goldwyn-Mayer (MGM): 1.11%
Relativity Media: 1.03%
Dreamworks Pictures: 1.03%
Fox Searchlight Pictures: 1.03%
DreamWorks Animation: 1.03%
New Regency Productions: 0.96%
Alcon Entertainment: 0.88%
Marvel Studios: 0.88%
Annapurna Pictures: 0.88%
Blumhouse Productions: 0.74%
The Weinstein Company: 0.74%
TriStar Pictures: 0.66%
BRON Studios: 0.66%
EuropaCorp: 0.66%
Chernin Entertainment: 0.52%
Exclusive Media Group: 0.52%
Open Road Films (II): 0.52%
StudioCanal: 0.44%
A24: 0.44%
STX Entertainment: 0.44%
Worldview Entertainment: 0.44%
Millennium Films: 0.44%
Dimension Films: 0.37%
FilmDistrict: 0.37%
IM Global: 0.37%
Legendary Entertainment: 0.37%
Cross Creek Pictures: 0.37%
Pixar Animation Studios: 0.37%
Walt Disney Animation Studios: 0.37%
3 Arts Entertainment: 0.29%
LD Entertainment: 0.29%
Participant: 0.29%
Bold Films: 0.29%
BBC Films: 0.29%
Black Bear Pictures: 0.29%
Gary Sanchez Productions: 0.29%
DreamWorks: 0.29%
Amazon Studios: 0.29%
Voltage Pictures: 0.29%
Sony Pictures Animation: 0.29%
Heyday Films: 0.29%
Twentieth Century Fox Animation: 0.29%
Gravier Productions: 0.29%

Working Title Films: 0.22%
DiNovi Pictures: 0.22%
Film4: 0.22%
PalmStar Media: 0.22%
IAC Films: 0.22%
Pathé: 0.22%
Sycamore Pictures: 0.22%
Bazelevs Production: 0.22%
Blue Sky Studios: 0.22%
Good Universe: 0.22%
Paramount Animation: 0.22%
Blueprint Pictures: 0.22%
Entertainment One: 0.22%
Red Crown Productions: 0.22%
Bona Film Group: 0.22%
Orion Pictures: 0.22%
Lucasfilm: 0.22%
Bluegrass Films: 0.22%
LStar Capital: 0.22%
Emmett/Furla/Oasis Films (EFO Films): 0.22%
Broad Green Pictures: 0.22%
Gramercy Pictures (I): 0.15%
Apatow Productions: 0.15%
Recorded Picture Company (RPC): 0.15%
Appian Way: 0.15%
Armory Films: 0.15%
STX Films: 0.15%
Huayi Brothers Media: 0.15%
Corsan: 0.15%
Cinereach: 0.15%
BenderSpink: 0.15%
Imagine Entertainment: 0.15%
Quad Productions: 0.15%
DJ Films: 0.15%
Anonymous Content: 0.15%
Covert Media: 0.15%
Escape Artists: 0.15%
21 Laps Entertainment: 0.15%
Lakeshore Entertainment: 0.15%
Open Road Films: 0.15%
Intrepid Pictures: 0.15%
Route One Entertainment: 0.15%
Raindog Films: 0.15%
Incentive Filmed Entertainment: 0.15%
Space Rocket Nation: 0.15%
Aldamisa Entertainment: 0.15%
Fingerprint Releasing: 0.15%
AI-Film: 0.15%
Studio Ghibli: 0.15%
Screen Australia: 0.15%
Astute Films: 0.15%
Davis Entertainment: 0.15%
Paramount Vantage: 0.15%
Muse Productions: 0.15%
Alloy Entertainment: 0.15%
SBS Productions: 0.15%

Wildgaze Films: 0.15%
Before The Door Pictures: 0.15%
Endgame Entertainment: 0.15%
Broadway Video: 0.15%
Big Beach Films: 0.15%
Indian Paintbrush: 0.15%
BET Films: 0.15%
Huayi Brothers: 0.15%
American Zoetrope: 0.15%
Insurge Pictures: 0.15%
Brownstone Productions (II): 0.15%
Perfect World Pictures: 0.15%
Di Bonaventura Pictures: 0.15%
Golden Harvest Company: 0.15%
Double Dare You (DDY): 0.15%
2DUX²: 0.15%
China Film Group Corporation (CFGC): 0.15%
Hurwitz Creative: 0.15%
Aggregate Films: 0.15%
Broken Road Productions: 0.15%
Kramer & Sigman Films: 0.15%
Atlas Entertainment: 0.15%
Sony Pictures Entertainment (SPE): 0.15%
Duplass Brothers Productions: 0.15%
RatPac-Dune Entertainment: 0.15%
Village Roadshow Pictures: 0.15%
Animal Logic: 0.15%
Green Hat Films: 0.15%
Cinelou Films: 0.15%
Mandeville Films: 0.15%
Illumination Entertainment: 0.15%
Gotham Group: 0.15%
Roadside Attractions: 0.07%
Blue Budgie Films Limited: 0.07%
RADiUS-TWC: 0.07%
Aurora Alliance Films: 0.07%
Black Entertainment Television (BET): 0.07%
erbp: 0.07%
Mandalay Vision: 0.07%
Why Not Productions: 0.07%
Prettybird: 0.07%
Ghoulardi Film Company: 0.07%
Canana Films: 0.07%
Angry Films: 0.07%
The Ink Factory: 0.07%
Atlantic Records: 0.07%
Big Indie Pictures: 0.07%
Likely Story: 0.07%
Cre Film: 0.07%
Eros Worldwide: 0.07%
Bleecker Street Films: 0.07%
Sikhya Entertainment: 0.07%
After Dark Films: 0.07%
Double Feature Films: 0.07%
Danmarks Radio (DR): 0.07%
Memento Films Production: 0.07%

Diagonal TV: 0.07%
Skyscraper Films: 0.07%
Pressman Film: 0.07%
Archer Gray: 0.07%
Silver Reel: 0.07%
Bad Cop Bad Cop Film Productions: 0.07%
Verisimilitude: 0.07%
Atlantic Pictures (II): 0.07%
Also Known As Pictures: 0.07%
Samuel Goldwyn Films: 0.07%
Forward Pass: 0.07%
Animal Kingdom: 0.07%
Arcade Pictures: 0.07%
Bellanova Films: 0.07%
Artists First: 0.07%
Lucky Monkey Pictures: 0.07%
Faliro House Productions: 0.07%
George Films: 0.07%
Unplanned Movie: 0.07%
Los Angeles Media Fund (LAMF): 0.07%
Hicktown Entertainment: 0.07%
Westerly Films: 0.07%
BlackWhite: 0.07%
Northern Lights Films: 0.07%
Upside Down Films: 0.07%
Fermion Films: 0.07%
Fewlas Entertainment: 0.07%
WhiteFlame Productions: 0.07%
Reprisal Films: 0.07%
Audax Films: 0.07%
Preferred Content: 0.07%
Gracie Films: 0.07%
See-Saw Films: 0.07%
MK2 Productions: 0.07%
Awesomeness Films: 0.07%
Elle Driver: 0.07%
Goalpost Pictures: 0.07%
Emphatic Films: 0.07%
Zentropa Entertainments: 0.07%
Human Stew Factory: 0.07%
Forest Whitaker's Significant Productions: 0.07%
Rook Films: 0.07%
AR Films: 0.07%
Codeblack Entertainment: 0.07%
Scott Free Productions: 0.07%
i am OTHER: 0.07%
Cloud Eight Films: 0.07%
Big Screen Productions: 0.07%
Keep Your Head: 0.07%
Chestnut Ridge Productions: 0.07%
Porchlight Films: 0.07%
K5 International: 0.07%
Toy Fight Productions: 0.07%
Hydraulx: 0.07%
Houston King Productions: 0.07%
Max Films Productions: 0.07%

Black Label Media: 0.07%
Electric City Entertainment: 0.07%
ShivHans Pictures: 0.07%
Warner Bros. Animation: 0.07%
Prospero Pictures: 0.07%
NVSH Productions: 0.07%
Warner Bros. Digital Distribution: 0.07%
Bleiberg Entertainment: 0.07%
Caviar: 0.07%
Iconoclast: 0.07%
Double Nickel Entertainment: 0.07%
Atlas Productions: 0.07%
Dog Run Pictures: 0.07%
Astrakan Films: 0.07%
Fuego Films: 0.07%
SModcast Pictures: 0.07%
Artists Public Domain: 0.07%
Company Films: 0.07%
BN Films: 0.07%
Automatik Entertainment: 0.07%
Allspark Pictures: 0.07%
Freedom Media: 0.07%
La Petite Reine: 0.07%
Vendian Entertainment: 0.07%
HanWay Films: 0.07%
Semtex Films: 0.07%
Cocktail Film: 0.07%
Greater Productions: 0.07%
Magnolia Pictures: 0.07%
CG Cinéma: 0.07%
Beijing New Picture Film: 0.07%
Dune Entertainment: 0.07%
B Story: 0.07%
Ada Films: 0.07%
Elara Pictures: 0.07%
Sailor Bear: 0.07%
Lyla Films: 0.07%
3311 Productions: 0.07%
2929 Productions: 0.07%
Aamir Khan Productions: 0.07%
Rhombus Media: 0.07%
Rogue Pictures: 0.07%
Frenesy Film Company: 0.07%
The Lab of Madness: 0.07%
Tribeca Productions: 0.07%
Bloom: 0.07%
FilmNation Entertainment: 0.07%
Braven Films: 0.07%
Steel Mill Pictures: 0.07%
No Trace Camping: 0.07%
Gaumont: 0.07%
Fortis Films: 0.07%
Chase Films: 0.07%
Burk A Project: 0.07%
Amasia Entertainment: 0.07%
Hidden Empire Film Group (HEFG): 0.07%

Trésor Films: 0.07%
Pt. Merantau Films: 0.07%
X-Filme Creative Pool: 0.07%
Milk & Media: 0.07%
BCDF Pictures: 0.07%
Unison Films: 0.07%
Motlys: 0.07%
Gail Katz Productions: 0.07%
Mimran Schur Pictures: 0.07%
SpectreVision: 0.07%
Disruption Entertainment: 0.07%
Sony Pictures Classics: 0.07%
Alliance: 0.07%
Abbolita Productions: 0.07%
Foresight Unlimited: 0.07%
AdScott Pictures: 0.07%
Carver Films: 0.07%
Verdi Productions: 0.07%
Salon Pictures: 0.07%
Andrew Lauren Productions: 0.07%
The Safran Company: 0.07%
Alfama Films: 0.07%
Depth of Field: 0.07%
Anchor Bay Films: 0.07%
Asghar Farhadi Productions: 0.07%
Mayhem Pictures: 0.07%
Summit Premiere: 0.07%
Genre Films: 0.07%
Sparkle Roll Media: 0.07%
2.0 Entertainment: 0.07%
Gulfstream Pictures: 0.07%
Cloud Atlas Productions: 0.07%
Legend3D: 0.07%
Studio 37: 0.07%
Dark Castle Entertainment: 0.07%
Marcy Media: 0.07%
Carousel Productions (II): 0.07%
Paramount Players: 0.07%
Millennium Media: 0.07%
Disneytoon Studios: 0.07%
Pyramania: 0.07%
Mediapro: 0.07%
Dickhouse Productions: 0.07%
Decibel Films: 0.07%
Film 44: 0.07%
Visiona Romantica: 0.07%
Closest to the Hole Productions: 0.07%
Access Entertainment: 0.07%
Iron Horse Entertainment (II): 0.07%
Riddick Canada Productions: 0.07%
Amblin Entertainment: 0.07%
TSG Entertainment: 0.07%
Gold Circle Films: 0.07%
Point Grey Pictures: 0.07%
Hivemind: 0.07%
Huayi Brothers Pictures: 0.07%

Onyx Films: 0.07%
Studio 8: 0.07%
Blinding Edge Pictures: 0.07%
Abraham Productions: 0.07%
Reel FX Creative Studios: 0.07%
Twisted Pictures: 0.07%
Hartbeat Productions: 0.07%
Apartment Story: 0.07%
Little Stranger: 0.07%
20th Century Studios: 0.07%
Beijing Skywheel Entertainment Co.: 0.07%
Toei Company: 0.07%
Overbrook Entertainment: 0.07%
Skydance Media: 0.07%
SnowPiercer: 0.07%
FortyFour Studios: 0.07%
Red Granite Pictures: 0.07%
Roth Films: 0.07%
Warner Bros. Pictures: 0.07%
Beijing Diqi Yinxiang Entertainment: 0.07%
Hasbro: 0.07%
Syncopy: 0.07%
Allison Shearmur Productions: 0.07%
Dentsu: 0.07%
Beijing Dengfeng International Culture Communications Company: 0.07%
Lucamar Productions: 0.07%
Marvel Enterprises: 0.07%
Marvel Entertainment: 0.07%
Jolie Pas: 0.07%
Chris Morgan Productions: 0.07%
Avi Arad Productions: 0.07%
Color Force: 0.07%
B24: 0.07%
Fairview Entertainment: 0.07%
Atomic Monster: 0.07%
Legendary East: 0.07%
Follow Through Productions: 0.07%
BBL Motion Picture Studios: 0.07%
Brownstone Entertainment (II): 0.07%
"Weathering With You" Film Partners: 0.07%
Touchstone Pictures: 0.07%
Waverly Films: 0.07%
Mediaset España: 0.07%
Total Recall: 0.07%
Clubhouse Pictures (II): 0.07%
Lava Bear Films: 0.07%
Warner Animation Group: 0.07%
Bullwinkle Studios: 0.07%
Scott Rudin Productions: 0.07%
Carnival Film & Television: 0.07%
Prana Studios: 0.07%
Constantin Film International: 0.07%
Flashlight Films: 0.07%
Buena Vista International: 0.07%
Monkeypaw Productions: 0.07%
Barunson E&A: 0.07%

Translux: 0.07%
BZ Entertainment: 0.07%
SharpSword Films: 0.07%
Affirm Films: 0.07%
Ruby Films: 0.07%
Big Talk Productions: 0.07%
GoldDay: 0.07%
Block / Hanson: 0.07%
Element Pictures: 0.07%
Grisbi Productions, Le: 0.07%
Black Bicycle Entertainment: 0.07%
Plan B Entertainment: 0.07%
Fear of God Films: 0.07%
Hunter Killer Productions: 0.07%
Alibaba Pictures: 0.07%
Cliffjack Motion Pictures: 0.07%
Parts and Labor: 0.07%
1978 Films: 0.07%
DNA Films: 0.07%
Clinica Estetico: 0.07%
Bad Robot: 0.07%
Artbees: 0.07%
Goddard Textiles: 0.07%
Votiv Films: 0.07%
Acacia Filmed Entertainment: 0.07%
Boies / Schiller Film Group: 0.07%
Arka Mediaworks: 0.07%
Forecast Pictures: 0.07%
Baby Way Productions: 0.07%
ASIG Productions: 0.07%
LBI Productions: 0.07%
Scion Films: 0.07%
Primate Pictures: 0.07%
Snoot Entertainment: 0.07%
Stoney Lake Entertainment: 0.07%
Morgan Creek Entertainment: 0.07%
Alliance Films: 0.07%
Blue Sky Films: 0.07%
River Road Entertainment: 0.07%
Miramax: 0.07%
Les Films du Losange: 0.07%
GK Films: 0.07%
Eclectic Pictures: 0.07%
Aviron Pictures: 0.07%
Dayday Films: 0.07%
Lutzus-Brown: 0.07%
Kevin Downes Productions: 0.07%
FaithStep Films: 0.07%
Matchbox Pictures: 0.07%
Pantelion Films: 0.07%
Chockstone Pictures: 0.07%
Mooz Films: 0.07%
Pure Flix Productions: 0.07%
Tonik Productions: 0.07%
Four Seasons Partnership: 0.07%
CalMaple: 0.07%

Block 2 Pictures: 0.07%
Origin Pictures: 0.07%
The Tyler Perry Company: 0.07%
Blue Yonder Films: 0.07%
Hopscotch Features: 0.07%
Ixtlan: 0.07%
Macari/Edelstein: 0.07%
Media Rights Capital (MRC): 0.07%
De Line Pictures: 0.07%
Ghost House Pictures: 0.07%
thefyzz: 0.07%
Headline Pictures: 0.07%
Callahan Filmworks: 0.07%
CJ Entertainment: 0.07%
Treehouse Pictures: 0.07%
Two Ton Films: 0.07%
Sidney Kimmel Entertainment: 0.07%
Enticing Entertainment: 0.07%
MWM Studios: 0.07%
Paulilu Productions: 0.07%
Entertainment Studios Motion Pictures: 0.07%
IFC Productions: 0.07%
Cave 76: 0.07%
1984 Private Defense Contractors: 0.07%
Bob Industries: 0.07%
Davis-Films: 0.07%
Truth Entertainment (II): 0.07%
Monsterfoot Productions: 0.07%
Panorama Films: 0.07%
Imperative Entertainment: 0.07%
Omnilab Media: 0.07%
Cottonwood Pictures: 0.07%
Enderby Entertainment: 0.07%

```
In [1]: # Budget has a high correlation with the gross earnings  
        # Companies like Walt Disney Pictures, Warner Bros., and Universal Pictures have so
```