```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
df=pd.read csv("Netflix (2).csv")
df
                      Title
                                                                 Genre \
                            Crime, Drama, Fantasy, Horror, Romance
          Lets Fight Ghost
0
1
       HOW TO BUILD A GIRL
                                                                Comedy
                 Centigrade
2
                                                      Drama, Thriller
3
                      ANNE+
                                                                 Drama
4
                      Moxie
                                              Animation, Short, Drama
15478
                        NaN
                                                                   NaN
15479
                        NaN
                                                                   NaN
15480
                        NaN
                                                                   NaN
15481
                        NaN
                                                                   NaN
15482
                        NaN
                                                                   NaN
                                            Hidden Gem Score ∖
               Languages Series or Movie
       Swedish, Spanish
                                   Series
                                                          4.3
1
                 English
                                    Movie
                                                          7.0
2
                 English
                                    Movie
                                                          6.4
3
                 Turkish
                                   Series
                                                          7.7
4
                 English
                                                          8.1
                                    Movie
15478
                     NaN
                                      NaN
                                                          NaN
                     NaN
15479
                                      NaN
                                                         NaN
15480
                     NaN
                                      NaN
                                                         NaN
15481
                     NaN
                                      NaN
                                                         NaN
15482
                     NaN
                                      NaN
                                                          NaN
                                      Country Availability
                                                                   Runtime
0
                                                   Thailand < 30 minutes
1
                                                                  1-2 hour
                                                     Canada
2
                                                     Canada
                                                                  1-2 hour
                                       Belgium, Netherlands < 30 minutes
       Lithuania, Poland, France, Iceland, Italy, Spain, Gr...
                                                                  1-2 hour
15478
                                                        NaN
                                                                        NaN
15479
                                                        NaN
                                                                        NaN
```

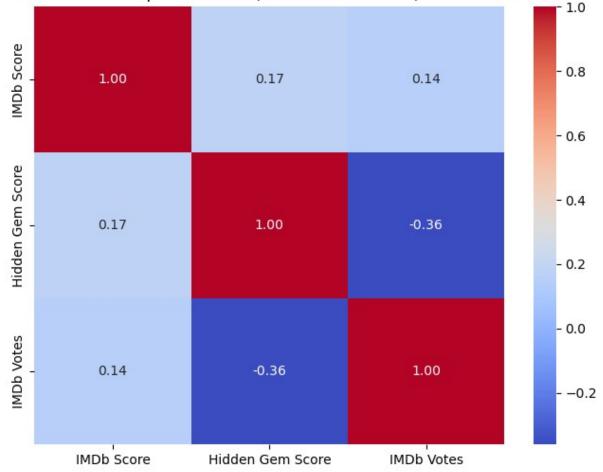
15480			NaN	NaN				
15481			NaN	NaN				
15482			NaN	NaN				
	Dinastan	Mait						
0 1	Director Tomas Alfredson Coky Giedroyc	Write John Ajvide Lindqvi Caitlin Mora	st					
2	Brendan Walsh NaN	Brendan Walsh, Daley Nix						
4	Stephen Irwin	Na	aN					
15478 15479	NaN	Na	aN aN					
15480	NaN NaN	Na	aN aN					
15481 15482	NaN NaN		aN aN					
Dati a	,		Actors View	N				
Rating 0		Per Ragnar, Lina Leanders	son,	R				
1	Paddy Considine, Cleo, Beanie Feldstein, Dónal R							
2		Genesis Rodriguez, Vincen	t Piazza	Unrated				
3	Vahide Perçin, Gonca Vuslateri, Cansu Dere, Be NaN							
4		Ragga	a Gudrun	NaN				
15478			NaN	NaN				
15479			NaN	NaN				
15480			NaN	NaN				
15481			NaN	NaN				
15482			NaN	NaN				
	IMDb Score Rotto	en Tomatoes Score Metacr	itic Score `	\				
0 1	7.9 5.8	98.0 79.0	82.0 69.0					
2	4.3 6.5	NaN NaN	46.0 NaN					

4		6.3		Na	N		NaN	
 15478		 NaN		 Na			 NaN	
15478		NaN		Na Na			NaN	
15480		NaN		Na			NaN	
15481		NaN		Na			NaN	
15482		NaN		Na	N		NaN	
	Awards	Nominated	For	Boxoffice	Releas	e Date	Netflix	Release
Date	\ \	Nomitina cea	101	BOXOTTICE	ric ccus	C Date	MCCICIX	ne rease
0		!	57.0	\$2,122,065	12-	Dec-08		04-03-
2021				+70 600	2.0			0.4.00
1 2021			NaN	\$70,632	- 80	May-20		04-03-
2021			NaN	\$16,263	28-	Aug-20		04-03-
2021			11011	Ψ10,200		rag _c		0.05
3			NaN	NaN	01-	0ct-16		04-03-
2021			4.0	NI - NI	22	C 11		04.00
4 2021			4.0	NaN	22-	Sep-11		04-03-
15478			NaN	NaN		NaN		
NaN			NI = NI	NI - NI		NI - NI		
15479 NaN			NaN	NaN		NaN		
15480			NaN	NaN		NaN		
NaN			11011					
15481			NaN	NaN		NaN		
NaN			N = N	N - N		NI NI		
15482 NaN			NaN	NaN		NaN		
IVAIV								
				_	x Link	IMDb \		
0				m/watch/81			26.0	
1 2				om/watch/81 om/watch/81			338.0 720.0	
3				m/watch/81			147.0	
4	•			m/watch/81			63.0	
	·							
15478					NaN		NaN	
15479 15480					NaN NaN		NaN NaN	
15481					NaN		NaN	
15482					NaN		NaN	
[15402	no. 10 35	20 001	c 1					
[15483	rows x	20 column	5]					

```
# Extract necessary columns for correlation heatmap
correlation_data = df[['IMDb Score', 'Hidden Gem Score', 'IMDb
Votes']].dropna()

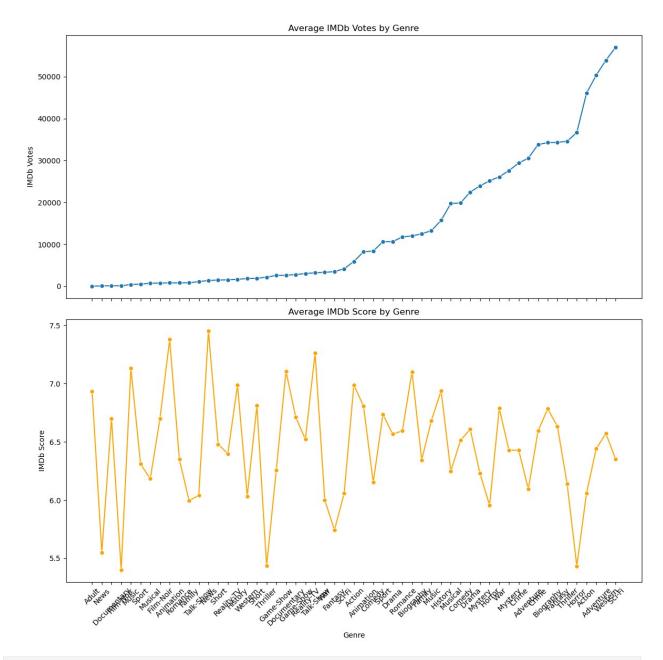
# Create the heatmap for correlation analysis
plt.figure(figsize=(8, 6))
sns.heatmap(correlation_data.corr(), annot=True, cmap='coolwarm',
fmt='.2f')
plt.title('Correlation Heatmap: IMDb Score, Hidden Gem Score, and IMDb
Votes')
plt.show()
```





```
# Preprocess genre data for line plots
# Split genres into lists and expand into rows
data_expanded =
df.assign(Genre=df['Genre'].str.split(',')).explode('Genre').dropna(subset=['IMDb Votes', 'IMDb Score'])
```

```
# Group by Genre for plotting
genre grouped votes = data expanded.groupby('Genre')['IMDb
Votes'].mean().sort values()
genre grouped scores = data expanded.groupby('Genre')['IMDb
Score'].mean().sort values()
# Create line plots and subplots
fig, axes = plt.subplots(2, 1, figsize=(12, 12), sharex=True)
# IMDb Votes by Genre
sns.lineplot(x=genre grouped votes.index,
y=genre grouped votes.values, ax=axes[0], marker='o')
axes[0].set title('Average IMDb Votes by Genre')
axes[0].set ylabel('IMDb Votes')
axes[0].tick params(axis='x', rotation=45)
# IMDb Scores by Genre
sns.lineplot(x=genre grouped scores.index,
y=genre_grouped_scores.values, ax=axes[1], marker='o', color='orange')
axes[1].set title('Average IMDb Score by Genre')
axes[1].set ylabel('IMDb Score')
axes[1].tick params(axis='x', rotation=45)
plt.tight layout()
plt.show()
```



```
# IMDb Votes by Genre
sns.lineplot(x=genre_grouped_votes.index,
y=genre_grouped_votes.values, ax=axes[0], marker='o')
axes[0].set_title('Average IMDb Votes by Genre')
axes[0].set_ylabel('IMDb Votes')
axes[0].tick_params(axis='x', rotation=45)

# IMDb Scores by Genre
sns.lineplot(x=genre_grouped_scores.index,
y=genre_grouped_scores.values, ax=axes[1], marker='o', color='orange')
axes[1].set_title('Average IMDb Score by Genre')
```

```
axes[1].set_ylabel('IMDb Score')
axes[1].tick_params(axis='x', rotation=45)

plt.tight_layout()
plt.show()

<Figure size 640x480 with 0 Axes>
```