

EXPERIMENT - 22

BY

CH.S.B.CHARAN

ECE - IOT

122010406001

In [1]:

```
import pandas as pd
data = pd.read_csv("NetflixOriginals.csv")
```

In [8]:

data

Out[8]:

	Title	Genre	Premiere	Runtime	IMDB Score	Language
0	Enter the Anime	Documentary	August 5, 2019	58	2.5	English/Japanese
1	Dark Forces	Thriller	August 21, 2020	81	2.6	Spanish
2	The App	Science fiction/Drama	December 26, 2019	79	2.6	Italian
3	The Open House	Horror thriller	January 19, 2018	94	3.2	English
4	Kaali Khuhi	Mystery	October 30, 2020	90	3.4	Hindi
...

In [2]:

data.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 584 entries, 0 to 583
Data columns (total 6 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Title            584 non-null    object
1   Genre            584 non-null    object
2   Premiere         584 non-null    object
3   Runtime          584 non-null    int64
4   IMDB Score       584 non-null    float64
5   Language         584 non-null    object
dtypes: float64(1), int64(1), object(4)
memory usage: 27.5+ KB
```

In [3]:

data.dtypes

Out[3]:

```
Title            object
Genre            object
Premiere         object
Runtime          int64
IMDB Score       float64
Language         object
dtype: object
```

In [4]:

data.head()

Out[4]:

	Title	Genre	Premiere	Runtime	IMDB Score	Language
0	Enter the Anime	Documentary	August 5, 2019	58	2.5	English/Japanese
1	Dark Forces	Thriller	August 21, 2020	81	2.6	Spanish
2	The App	Science fiction/Drama	December 26, 2019	79	2.6	Italian
3	The Open House	Horror thriller	January 19, 2018	94	3.2	English
4	Kaali Khuhi	Mystery	October 30, 2020	90	3.4	Hindi

In [5]:

```
data.tail()
```

Out[5]:

	Title	Genre	Premiere	Runtime	IMDB Score	Language
579	Taylor Swift: Reputation Stadium Tour	Concert Film	December 31, 2018	125	8.4	Engl
580	Winter on Fire: Ukraine's Fight for Freedom	Documentary	October 9, 2015	91	8.4	English/Ukranian/Russ
581	Springsteen on Broadway	One-man show	December 16, 2018	153	8.5	Engl
582	Emicida: AmarElo - It's All For Yesterday	Documentary	December 8, 2020	89	8.6	Portugue
583	David Attenborough: A Life on Our Planet	Documentary	October 4, 2020	83	9.0	Engl

In [6]:

```
data.columns
```

Out[6]:

```
Index(['Title', 'Genre', 'Premiere', 'Runtime', 'IMDB Score', 'Language'], dtype='object')
```

In [7]:

data.items

Out[7]:

```
<bound method DataFrame.items of
Title          Genre \
0              Enter the Anime      Documentary
1              Dark Forces          Thriller
2              The App      Science fiction/Drama
3              The Open House      Horror thriller
4              Kaali Khuhi          Mystery
..              ...
579 Taylor Swift: Reputation Stadium Tour      Concert Film
580 Winter on Fire: Ukraine's Fight for Freedom      Documentary
581              Springsteen on Broadway      One-man show
582 Emicida: AmarElo - It's All For Yesterday      Documentary
583 David Attenborough: A Life on Our Planet      Documentary

Premiere Runtime IMDB Score Language
0      August 5, 2019      58      2.5      English/Japanese
1      August 21, 2020      81      2.6      Spanish
2      December 26, 2019      79      2.6      Italian
3      January 19, 2018      94      3.2      English
4      October 30, 2020      90      3.4      Hindi
..              ...      ...      ...
579 December 31, 2018      125      8.4      English
580 October 9, 2015      91      8.4      English/Ukrainian/Russian
581 December 16, 2018      153      8.5      English
582 December 8, 2020      89      8.6      Portuguese
583 October 4, 2020      83      9.0      English
```

[584 rows x 6 columns]>

In [9]:

data.describe()

Out[9]:

	Runtime	IMDB Score
count	584.000000	584.000000
mean	93.577055	6.271747
std	27.761683	0.979256
min	4.000000	2.500000
25%	86.000000	5.700000
50%	97.000000	6.350000
75%	108.000000	7.000000
max	209.000000	9.000000

In [10]:

```
data.count(axis=0)
```

Out[10]:

```
Title          584
Genre          584
Premiere       584
Runtime        584
IMDB Score     584
Language       584
dtype: int64
```

In [11]:

```
data.count(axis=1)
```

Out[11]:

```
0      6
1      6
2      6
3      6
4      6
..
579    6
580    6
581    6
582    6
583    6
Length: 584, dtype: int64
```

In [12]:

```
data.sum(axis=0)
```

Out[12]:

```
Title          Enter the AnimeDark ForcesThe AppThe Open Hous...
Genre          DocumentaryThrillerScience fiction/DramaHorror...
Premiere       August 5, 2019August 21, 2020December 26, 2019...
Runtime                                     54649
IMDB Score                                           3662.7
Language       English/JapaneseSpanishItalianEnglishHindiHind...
dtype: object
```

In [14]:

```
data.sum(axis=1)
```

Out[14]:

```
0      60.5
1      83.6
2      81.6
3      97.2
4      93.4
...
579    133.4
580     99.4
581    161.5
582     97.6
583     92.0
Length: 584, dtype: float64
```

In [13]:

```
data['Runtime'].sum()
```

Out[13]:

```
54649
```

In [19]:

```
data['IMDB Score'].sum()
```

Out[19]:

```
3662.7
```

In [15]:

```
data.median()
```

Out[15]:

```
Runtime      97.00
IMDB Score    6.35
dtype: float64
```

In [16]:

```
data.mean()
```

Out[16]:

```
Runtime      93.577055
IMDB Score    6.271747
dtype: float64
```

In [17]:

```
data.sum()
```

Out[17]:

```
Title      Enter the AnimeDark ForcesThe AppThe Open Hous...
Genre      DocumentaryThrillerScience fiction/DramaHorror...
Premiere   August 5, 2019August 21, 2020December 26, 2019...
Runtime                                54649
IMDB Score                                3662.7
Language   English/JapaneseSpanishItalianEnglishHindiHind...
dtype: object
```

In [18]:

```
data['Runtime'].mean()
```

Out[18]:

```
93.57705479452055
```

In [20]:

```
data['IMDB Score'].mean()
```

Out[20]:

```
6.2717465753424655
```

In [21]:

```
data.cummin()
```

Out[21]:

	Title	Genre	Premiere	Runtime	IMDB Score	Language
0	Enter the Anime	Documentary	August 5, 2019	58	2.5	English/Japanese
1	Dark Forces	Documentary	August 21, 2020	58	2.5	English/Japanese
2	Dark Forces	Documentary	August 21, 2020	58	2.5	English/Japanese
3	Dark Forces	Documentary	August 21, 2020	58	2.5	English
4	Dark Forces	Documentary	August 21, 2020	58	2.5	English
...

In [23]:

```
data['Runtime'].cumprod()
```

Out[23]:

```
0          58
1        4698
2       371142
3      34887348
4     3139861320
...
579          0
580          0
581          0
582          0
583          0
```

Name: Runtime, Length: 584, dtype: int64

In [25]:

```
data.cummax()
```

Out[25]:

	Title	Genre	Premiere	Runtime	IMDB Score	Language
0	Enter the Anime	Documentary	August 5, 2019	58	2.5	English/Japanese
1	Enter the Anime	Thriller	August 5, 2019	81	2.6	Spanish
2	The App	Thriller	December 26, 2019	81	2.6	Spanish
3	The Open House	Thriller	January 19, 2018	94	3.2	Spanish
4	The Open House	Thriller	October 30, 2020	94	3.4	Spanish
...
579	❖ ❖t?r❖	Zombie/Heist	September 9, 2020	209	8.4	Turkish
580	❖ ❖t?r❖	Zombie/Heist	September 9, 2020	209	8.4	Turkish
581	❖ ❖t?r❖	Zombie/Heist	September 9, 2020	209	8.5	Turkish
582	❖ ❖t?r❖	Zombie/Heist	September 9, 2020	209	8.6	Turkish
583	❖ ❖t?r❖	Zombie/Heist	September 9, 2020	209	9.0	Turkish

584 rows × 6 columns

In [26]:

```
data['Runtime'].pct_change()
```

Out[26]:

```
0      NaN
1    0.396552
2   -0.024691
3    0.189873
4   -0.042553
...
579   0.470588
580  -0.272000
581   0.681319
582  -0.418301
583  -0.067416
Name: Runtime, Length: 584, dtype: float64
```