## Untitled

#### August 5, 2021

```
[1]: import pandas as pd import pandasql
```

### 1 IMPORTANDO OS DADOS

```
[2]: df = pd.read_csv('Cópia de Awari Case DS - MoviesOnStreamingPlatforms_updated.

→csv')
```

### 2 CHECANDO DADOS

```
[3]: df.head(50)
[3]:
         ID
                                                Title
                                                       Year
                                                                   IMDb Rotten Tomatoes
                                                              Age
     0
           1
                                           Inception
                                                       2010
                                                              13+
                                                                    8.8
                                                                                      87%
          2
     1
                                          The Matrix
                                                       1999
                                                              18+
                                                                     8.7
                                                                                      87%
     2
          3
                             Avengers: Infinity War
                                                       2018
                                                              13+
                                                                    8.5
                                                                                      84%
     3
          4
                                 Back to the Future
                                                       1985
                                                               7+
                                                                    8.5
                                                                                      96%
     4
          5
                    The Good, the Bad and the Ugly
                                                       1966
                                                              18+
                                                                    8.8
                                                                                      97%
     5
          6
                 Spider-Man: Into the Spider-Verse
                                                       2018
                                                               7+
                                                                    8.4
                                                                                      97%
          7
     6
                                                       2002
                                                              18+
                                                                    8.5
                                                                                      95%
                                         The Pianist
     7
          8
                                                                                      87%
                                    Django Unchained
                                                       2012
                                                              18+
                                                                    8.4
     8
          9
                            Raiders of the Lost Ark
                                                       1981
                                                               7+
                                                                    8.4
                                                                                      95%
     9
         10
                               Inglourious Basterds
                                                       2009
                                                              18+
                                                                    8.3
                                                                                      89%
                                                       1976
                                                              18+
                                                                                      95%
     10
         11
                                         Taxi Driver
                                                                    8.3
                                                       2009
                                                                                     100%
     11
         12
                                            3 Idiots
                                                              13+
                                                                    8.4
     12
                                                       2006
                                                              18+
                                                                    8.2
                                                                                      95%
         13
                                     Pan's Labyrinth
     13
         14
                                                 Room
                                                       2015
                                                              18+
                                                                    8.1
                                                                                      93%
                                                                                      97%
     14
         15
                   Monty Python and the Holy Grail
                                                       1975
                                                               7+
                                                                    8.2
         16
                      Once Upon a Time in the West
                                                       1968
                                                              13+
                                                                    8.5
                                                                                      95%
     15
     16
         17
                Indiana Jones and the Last Crusade
                                                       1989
                                                              13+
                                                                    8.2
                                                                                      88%
     17
         18
                                       Groundhog Day
                                                       1993
                                                               7+
                                                                    8.0
                                                                                      96%
     18
         19
                                   The King's Speech
                                                       2010
                                                              18+
                                                                    8.0
                                                                                      95%
     19
         20
                                                  Her
                                                       2013
                                                              18+
                                                                    8.0
                                                                                      95%
                                                       2007
                                                              18+
     20
         21
                                There Will Be Blood
                                                                    8.2
                                                                                      91%
     21
         22
                                 The Social Network
                                                       2010
                                                              13+
                                                                    7.7
                                                                                      96%
     22
         23
                                 Dallas Buyers Club
                                                       2013
                                                              18+
                                                                    8.0
                                                                                      93%
```

```
24
23
              The Perks of Being a Wallflower
                                                   2012
                                                          13+
                                                                 8.0
                                                                                   86%
24
    25
                                  Life of Brian
                                                   1979
                                                                                   95%
                                                          18+
                                                                 8.1
25
    26
                                      Ex Machina
                                                   2015
                                                          18+
                                                                 7.7
                                                                                   92%
26
    27
                       Silver Linings Playbook
                                                   2012
                                                          18+
                                                                                   92%
                                                                 7.7
27
    28
                                      District 9
                                                   2009
                                                          18+
                                                                 7.9
                                                                                   90%
28
    29
                                    The Irishman 2019
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                                                                                   96%
                                                                 7.9
29
    30
                                            Moon
                                                   2009
                                                          18+
                                                                 7.9
                                                                                   90%
    31
                                                   2019
                                                          18+
                                                                                   95%
30
                                 Marriage Story
                                                                 8.0
                                                                                   92%
31
    32
                                           Drive
                                                   2011
                                                          18+
                                                                 7.8
32
    33
                                 Train to Busan
                                                   2016
                                                          NaN
                                                                 7.5
                                                                                   94%
33
    34
                                   Incredibles 2
                                                   2018
                                                           7+
                                                                 7.6
                                                                                   94%
34
    35
                                          Dangal
                                                   2016
                                                           7+
                                                                 8.4
                                                                                   88%
                                                                                   94%
35
    36
                                           Klaus
                                                   2019
                                                           7+
                                                                 8.2
                                                                                   90%
36
    37
                                Minority Report
                                                   2002
                                                          13+
                                                                 7.6
37
    38
                                    Mystic River
                                                   2003
                                                          18+
                                                                 7.9
                                                                                   88%
                                                                                   91%
38
    39
                            Like Stars on Earth
                                                   2007
                                                           7+
                                                                 8.4
39
    40
                      Ferris Bueller's Day Off
                                                                                   80%
                                                   1986
                                                          13+
                                                                 7.8
40
    41
                                  Despicable Me
                                                   2010
                                                           7+
                                                                 7.6
                                                                                   81%
41
    42
                                                                                   97%
                             Hell or High Water
                                                   2016
                                                          18+
                                                                 7.6
42
    43
                                        Sin City
                                                   2005
                                                          18+
                                                                 8.0
                                                                                   77%
43
    44
                                                   2008
                                                          18+
                                                                 8.0
                                                                                   85%
                                           Ip Man
44
    45
         Indiana Jones and the Temple of Doom
                                                   1984
                                                           7+
                                                                 7.6
                                                                                   85%
45
    46
                      The Theory of Everything
                                                   2014
                                                          13+
                                                                 7.7
                                                                                   79%
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46
                      The Pursuit of Happyness
                                                   2006
                                                          13+
                                                                 8.0
                                                                                   67%
47
    48
                                           Senna
                                                   2010
                                                          13+
                                                                 8.5
                                                                                   93%
48
    49
                   Scott Pilgrim vs. the World
                                                   2010
                                                          13+
                                                                 7.5
                                                                                   81%
                                                   1999
                                                                                   83%
49
    50
                                        Magnolia
                                                          18+
                                                                 8.0
    Netflix
             Hulu Prime Video
                                   Disney+
                                              Туре
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24	1	0		0	0	0	
25	1	0		0	0	0	
26	1	0		0	0	0	
27	1	0		0	0	0	
28	1	0		0	0	0	
29	1	0		0	0	0	
30	1	0		0	0	0	
31	1	0		1	0	0	
32	1	0		1	0	0	
33	1	0		0	0	0	
34	1	0		0	0	0	
35	1	0		0	0	0	
36	1	0		0	0	0	
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39	1	0		0	0	0	
40	1	0		0	0	0	
41	1	0		0	0	0	
42	1	0		0	0	0	
43	1	0		0	0	0	
44	1	0		0	0	0	
45	1	0		0	0	0	
46	1	0		0	0	0	
47	1	0		0	0	0	
48	1	0		0	0	0	
49	1	0		0	0	0	
						Direc	tors
0					Christo		
1			Lana	Wachowsk			
2					v Russo		

Anthony Russo, Joe Russo 2 3 Robert Zemeckis 4 Sergio Leone Bob Persichetti, Peter Ramsey, Rodney Rothman 5 6 Roman Polanski 7 Quentin Tarantino 8 Steven Spielberg 9 Quentin Tarantino 10 Martin Scorsese 11 Rajkumar Hirani 12 Guillermo del Toro

13	Lenny Abrahamson	
14	Terry Gilliam, Terry Jones	
	·	
15	Sergio Leone	
16	Steven Spielberg	
17	Harold Ramis	
18	Tom Hooper	
19	Spike Jonze	
20	Paul Thomas Anderson	
21	David Fincher	
22	Jean-Marc Vallée	
23	Stephen Chbosky	
24	Terry Jones	
25	Alex Garland	
26	David O. Russell	
27	Neill Blomkamp	
28	Martin Scorsese	
29	Duncan Jones	
30	Noah Baumbach	
	Nicolas Winding Pofn	
31	Nicolas Winding Refn	
32	Sang-ho Yeon	
33	Brad Bird	
34	Nitesh Tiwari	
35	Sergio Pablos, Carlos Martínez López	
36	Steven Spielberg	
37	Clint Eastwood	
38	Aamir Khan, Amole Gupte	
39	John Hughes	
	_	
40	Pierre Coffin, Chris Renaud	
41	David Mackenzie	
42	Frank Miller, Robert Rodriguez, Quentin Tarantino	
	_	
43	Wilson Yip	
44	Steven Spielberg	
45		
	James Marsh	
46	Gabriele Muccino	
47	Asif Kapadia	
48	Edgar Wright	
49	Paul Thomas Anderson	
	Genres	\
_		\
0	Action, Adventure, Sci-Fi, Thriller	
1	Action, Sci-Fi	
2	•	
	Action, Adventure, Sci-Fi	
3	Adventure, Comedy, Sci-Fi	
4	Western	
5	Animation, Action, Adventure, Family, Sci-Fi	
6	Biography,Drama,Music,War	
7	Drama, Western	
	Drama, western	

8	Action, Adventure
9	Adventure, Drama, War
10	Crime, Drama
11	•
12	Comedy, Drama
	Drama, Fantasy, War
13	Drama, Thriller
14	Adventure, Comedy, Fantasy
15	Western
16	Action, Adventure
17	Comedy, Fantasy, Romance
18	Biography,Drama,History
19	Drama, Romance, Sci-Fi
20	Drama
21	Biography, Drama
22	Biography, Drama
23	Drama, Romance
24	Comedy
25	Drama, Mystery, Sci-Fi, Thriller
26	Comedy, Drama, Romance
27	Action,Sci-Fi,Thriller
28	Biography, Crime, Drama
29	Drama, Mystery, Sci-Fi
30	Comedy, Drama, Romance
31	Crime, Drama
32	Action, Horror, Thriller
33	Animation, Action, Adventure, Comedy, Family, Sci-Fi
34	Action, Biography, Drama, Sport
35	Animation, Adventure, Comedy, Family
36	Action, Crime, Mystery, Sci-Fi, Thriller
37	Crime, Drama, Mystery, Thriller
38	Drama, Family
39	Comedy
40	Animation, Comedy, Family, Fantasy
41	Action, Crime, Drama, Thriller, Western
42	Crime, Thriller
43	Action, Adventure, Biography, Drama, History
44	
44 45	Action, Adventure
	Biography, Drama, Romance
46	Biography, Drama
47	Documentary, Biography, Sport
48	Action, Comedy, Fantasy, Romance
49	Drama
•	Country \
0	United States, United Kingdom
1	United States
2	United States

3	United States
4	Italy, Spain, West Germany
5	United States
6	United Kingdom, France, Poland, Germany
	·
7	United States
8	United States
9	Germany, United States
10	United States
11	India
12	Mexico, Spain
13	Ireland, Canada, United Kingdom, United States
14	United Kingdom
	-
15	Italy, United States
16	United States
17	United States
18	United Kingdom, United States, Australia
19	United States
20	United States
21	United States
22	United States
23	United States
24	United Kingdom
25	United Kingdom, United States
26	United States
27	South Africa, United States, New Zealand, Canada
28	United States
29	United Kingdom, United States
30	United Kingdom, United States
31	_
	United States
32	South Korea
33	United States
34	India
35	Spain
36	United States
37	United States, Australia
38	India
39	United States
40	United States, France
41	United States
42	United States
43	Hong Kong, China
44	United States
45	United Kingdom, Japan, United States
46	United States
47	
	United Kingdom, France, United States
48	United States, United Kingdom, Canada, Japan
49	United States

Language	Runtime
0 English, Japanese, French	148.0
1 English	136.0
2 English	149.0
3 English	116.0
4 Italian	161.0
5 English, Spanish	117.0
6 English, German, Russian	150.0
7 English, German, French, Italian	165.0
8 English, German, Hebrew, Spanish, Arabic, Nepali	115.0
9 English, German, French, Italian	153.0
10 English, Spanish	114.0
11 Hindi, English	170.0
12 Spanish	118.0
13 English	118.0
<u>e</u>	91.0
, 6 , 1	165.0
16 English, German, Greek, Arabic	127.0
17 English, French, Italian	101.0
18 English	118.0
19 English	126.0
20 English, American Sign Language	158.0
21 English, French	120.0
22 English, Japanese	117.0
23 English	103.0
24 English, Latin	94.0
25 English	108.0
26 English	122.0
27 English, Nyanja, Afrikaans, Zulu, Xhosa, Southern S	112.0
28 English, Italian, Latin, Spanish, German	209.0
29 English, Spanish	97.0
30 English, Spanish	137.0
31 English, Spanish	100.0
32 Korean, Hawaiian	118.0
33 English	118.0
34 Hindi	161.0
35 English, Saami	96.0
36 English, Swedish	145.0
37 English	138.0
38 Hindi, English	165.0
39 English, German	103.0
40 English	95.0
41 English	102.0
42 English	124.0
43 Cantonese, Mandarin, Japanese	106.0
44 English, Sinhalese, Hindi	118.0

```
45
                                                English, French
                                                                    123.0
     46
                                                                    117.0
                                             English, Cantonese
     47
                          English, Portuguese, French, Japanese
                                                                    106.0
     48
                                                        English
                                                                    112.0
     49
                                        English, German, French
                                                                    188.0
[4]: df.columns = ['id', 'title', 'year', 'age', 'imdb', 'rotten_tomatoes', __

¬'netflix', 'hulu', 'prime_video', 'disney+', 'type',
                     'directors', 'genres', 'country', 'language', 'runtime']
     df.head()
[5]:
[5]:
        id
                                                            imdb rotten_tomatoes
                                        title
                                                year
                                                      age
     0
         1
                                    Inception
                                                2010
                                                      13+
                                                             8.8
                                                                               87%
                                                      18+
         2
                                                                               87%
     1
                                   The Matrix
                                                1999
                                                             8.7
     2
         3
                     Avengers: Infinity War
                                                      13+
                                                                               84%
                                                2018
                                                             8.5
     3
                                                                               96%
         4
                          Back to the Future
                                                1985
                                                       7+
                                                             8.5
     4
         5
                                                1966
                                                                               97%
            The Good, the Bad and the Ugly
                                                      18+
                                                             8.8
        netflix
                  hulu
                        prime_video
                                       disney+
                                                                               directors
                                                 type
     0
               1
                      0
                                              0
                                                    0
                                                                      Christopher Nolan
               1
                     0
                                    0
                                              0
                                                       Lana Wachowski, Lilly Wachowski
     1
                                                    0
     2
               1
                      0
                                    0
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                                                    0
                                                               Anthony Russo, Joe Russo
     3
               1
                     0
                                    0
                                              0
                                                    0
                                                                        Robert Zemeckis
                                                    0
               1
                     0
                                    1
                                              0
                                                                           Sergio Leone
                                                                     country
                                     genres
        Action, Adventure, Sci-Fi, Thriller
                                             United States, United Kingdom
     0
                             Action, Sci-Fi
                                                              United States
     1
                                                              United States
     2
                  Action, Adventure, Sci-Fi
     3
                  Adventure, Comedy, Sci-Fi
                                                              United States
     4
                                    Western
                                                  Italy, Spain, West Germany
                         language
                                    runtime
        English, Japanese, French
     0
                                      148.0
     1
                          English
                                      136.0
     2
                          English
                                      149.0
     3
                          English
                                      116.0
                          Italian
     4
                                      161.0
```

# 3 PRODUZIDOS NO BRASIL ORDENADOS POR AVALI-AÇÃO

```
brazil_only_order_by_imdb = pandasql.sqldf('''SELECT Title, IMDb, Country
FROM df

WHERE Country = 'Brasil'
or Country = 'brasil'
or Country = 'BRASIL'
or Country = 'Brazil'
or Country = 'brazil'
or Country = 'brazil'
or Country = 'BRAZIL'
ORDER by IMDb□
```

```
[7]: brazil_only_order_by_imdb.head(20)
```

```
[7]:
                                       title imdb country
    0
                                Birth Reborn
                                            8.0 Brazil
                                            7.8 Brazil
    1
                           The Second Mother
                             Boy & the World 7.6 Brazil
    2
    3
                                               7.6 Brazil
                            Old Lord Savanna
    4
               Cinema, Aspirins and Vultures
                                               7.4 Brazil
                                              7.1 Brazil
    5
                       The Edge of Democracy
    6
                               Forever Chape
                                              7.1 Brazil
    7
                                   Laerte-se
                                               6.9 Brazil
                                   Good Luck 6.7 Brazil
    8
                    Whindersson Nunes: Adult
                                              6.7 Brazil
    9
                               Ana e Vitória 6.6 Brazil
    10
    11
          Liss Pereira: Renteniendo Liquidos
                                               6.6 Brazil
                                              6.6 Brazil
    12
                                    Hopefuls
    13
                      The Silence of the Sky
                                               6.5 Brazil
                                               6.5 Brazil
        Mauricio Meirelles: Generating Chaos
                                               6.5 Brazil
    15
                   Rafinha Bastos: Ultimatum
    16
                            A New Capitalism 6.5 Brazil
                                               6.5 Brazil
    17
                        The Man of the Crowd
                                               6.5 Brazil
    18
                                     America
    19
                City of God - 10 Years Later
                                               6.4 Brazil
```

# 4 DIRETORES COM MAIOR MÉDIA EM TÍTULOS DISPONÍVEIS NA NETFLIX E PRIMEVIDEO AO MESMO TEMPO

```
[13]: imdbOrderByDirectors = pandasql.sqldf('''SELECT directors, imdb, sum(imdb)/count(directors) AS<sub>□</sub> →mean
```

```
FROM df
                                                          WHERE netflix = '1'
                                                              AND prime_video = '1'
                                                                  GROUP BY directors
                                                                      ORDER BY mean_
       →DESC''')
[14]: imdbOrderByDirectors.head()
[14]:
                          directors
                                     imdb mean
      0
               Tom Barton-Humphreys
                                      8.7 8.70
                       Sergio Leone
                                      8.8 8.65
      1
      2
                        Chris Bould
                                      8.6 8.60
      3
                     Roman Polanski
                                      8.5 8.50
      4 Kevin Booth, David Johndrow
                                      8.5 8.50
[]:
```