## Pandas Movie DataSet

## December 16, 2020

## 0.0.1 Movies Dataset

```
[1]: import pandas as pd
     import numpy as np
     import matplotlib.pyplot as plt
[2]: df = pd.read_csv("Dataset/movie_metadata.csv")
[3]:
     df.head()
[3]:
        color
                    director_name
                                    num_critic_for_reviews
                                                              duration
        Color
                    James Cameron
                                                      723.0
                                                                 178.0
        Color
                   Gore Verbinski
                                                      302.0
                                                                 169.0
     1
     2 Color
                       Sam Mendes
                                                      602.0
                                                                 148.0
     3
        Color
               Christopher Nolan
                                                      813.0
                                                                 164.0
     4
                      Doug Walker
          NaN
                                                        NaN
                                                                   NaN
        director_facebook_likes
                                   actor_3_facebook_likes
                                                                 actor_2_name
     0
                              0.0
                                                     855.0
                                                             Joel David Moore
                           563.0
                                                    1000.0
                                                                Orlando Bloom
     1
     2
                              0.0
                                                     161.0
                                                                 Rory Kinnear
     3
                         22000.0
                                                   23000.0
                                                               Christian Bale
     4
                                                                   Rob Walker
                           131.0
                                                       NaN
        actor_1_facebook_likes
                                        gross
                                                                           genres
     0
                         1000.0
                                  760505847.0
                                                Action | Adventure | Fantasy | Sci-Fi
     1
                        40000.0
                                  309404152.0
                                                       Action | Adventure | Fantasy
     2
                        11000.0
                                  200074175.0
                                                      Action | Adventure | Thriller
                        27000.0
                                  448130642.0
                                                                 Action|Thriller
     3
                                                                     Documentary
     4
                          131.0
                                          NaN
       num_user_for_reviews language
                                        country
                                                  content_rating
                                                                         budget
                              English
                                             USA
                                                            PG-13
                                                                   237000000.0
     0
                      3054.0
                              English
                                            USA
                                                            PG-13
                                                                   30000000.0
     1
                      1238.0
     2
                       994.0
                              English
                                             UK
                                                            PG-13
                                                                   245000000.0
                      2701.0
     3
                                             USA
                                                            PG-13
                                                                   250000000.0
                               English
     4
                         NaN
                                   NaN
                                            NaN
                                                              NaN
                                                                            NaN
```

```
title_year actor_2_facebook_likes imdb_score
                                                       aspect_ratio \
     0
            2009.0
                                                 7.9
                                                               1.78
                                    936.0
     1
            2007.0
                                   5000.0
                                                 7.1
                                                               2.35
     2
            2015.0
                                    393.0
                                                 6.8
                                                               2.35
     3
                                                               2.35
            2012.0
                                  23000.0
                                                 8.5
                                                 7.1
               NaN
                                     12.0
                                                                NaN
      movie_facebook_likes
     0
                      33000
     1
                          0
     2
                      85000
     3
                     164000
     [5 rows x 28 columns]
[4]: columns = df.columns
     print(columns)
    Index(['color', 'director_name', 'num_critic_for_reviews', 'duration',
           'director_facebook_likes', 'actor_3_facebook_likes', 'actor_2_name',
           'actor_1_facebook_likes', 'gross', 'genres', 'actor_1_name',
           'movie_title', 'num_voted_users', 'cast_total_facebook_likes',
           'actor_3_name', 'facenumber_in_poster', 'plot_keywords',
           'movie_imdb_link', 'num_user_for_reviews', 'language', 'country',
           'content_rating', 'budget', 'title_year', 'actor_2_facebook_likes',
           'imdb_score', 'aspect_ratio', 'movie_facebook_likes'],
          dtype='object')
[5]: | scores = list(df.get('imdb_score'))
     print(scores)
    [7.9, 7.1, 6.8, 8.5, 7.1, 6.6, 6.2, 7.8, 7.5, 7.5, 6.9, 6.1, 6.7, 7.3, 6.5, 7.2,
    6.6, 8.1, 6.7, 6.8, 7.5, 7.0, 6.7, 7.9, 6.1, 7.2, 7.7, 8.2, 5.9, 7.0, 7.8, 7.3,
    7.2, 6.5, 6.8, 7.3, 6.0, 5.7, 6.4, 6.7, 6.8, 6.3, 5.6, 8.3, 6.6, 7.2, 7.0, 8.0,
    7.8, 6.3, 7.3, 6.6, 7.0, 6.3, 6.2, 6.8, 7.2, 7.5, 8.4, 6.2, 5.8, 6.8, 5.4, 6.6,
    6.9, 7.3, 9.0, 8.3, 6.5, 7.9, 7.5, 4.8, 5.2, 6.9, 5.4, 7.9, 6.1, 5.8, 8.3, 7.8,
    7.0, 6.1, 7.0, 7.6, 4.5, 6.3, 7.8, 6.4, 6.5, 7.9, 7.8, 6.6, 5.5, 8.2, 6.4, 8.1,
    8.6, 8.8, 8.2, 7.9, 6.7, 7.8, 7.8, 6.6, 6.1, 5.6, 6.4, 6.1, 7.3, 6.6, 6.3, 6.1,
    7.1, 5.5, 7.5, 7.6, 6.4, 7.2, 6.7, 8.0, 8.3, 6.7, 5.9, 6.7, 6.7, 7.6, 7.2, 7.1,
    8.1, 6.7, 7.0, 6.9, 5.1, 5.8, 6.2, 7.4, 5.8, 6.6, 6.2, 7.3, 4.2, 6.9, 6.4, 5.4,
    6.7, 5.8, 6.9, 7.2, 6.9, 6.1, 5.5, 6.6, 6.1, 6.3, 7.2, 7.4, 7.3, 6.1, 7.7, 6.1,
    8.0, 7.3, 7.9, 5.5, 5.0, 7.7, 6.6, 5.7, 5.8, 6.0, 6.4, 6.9, 6.4, 7.4, 5.5, 5.9,
    6.8, 7.5, 6.8, 8.1, 6.5, 7.2, 6.7, 8.1, 7.6, 7.4, 7.6, 5.5, 6.7, 6.5, 6.6, 6.7,
    6.4, 5.8, 7.4, 7.8, 6.6, 4.9, 6.5, 7.5, 6.2, 7.3, 7.5, 5.6, 8.2, 8.1, 6.4, 6.7,
    6.6, 6.4, 7.5, 7.3, 7.5, 5.8, 7.5, 6.6, 6.7, 3.7, 6.0, 6.4, 6.1, 6.4, 5.6, 8.0,
    5.2, 7.1, 4.8, 7.0, 5.4, 6.6, 6.7, 6.2, 6.1, 5.3, 6.3, 7.0, 7.6, 6.7, 8.1, 6.7,
    6.5, 7.3, 5.1, 6.0, 6.1, 5.9, 7.8, 5.8, 6.3, 4.3, 6.4, 6.1, 6.5, 7.1, 6.4, 6.5,
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6.8, 3.8, 7.1, 7.2, 5.9, 7.1, 8.1, 7.2, 6.9, 4.4, 6.5, 8.5, 7.7, 7.4, 8.0, 5.7,
8.5, 7.0, 7.8, 7.2, 6.4, 5.5, 6.7, 6.1, 8.5, 6.9, 7.3, 6.7, 6.9, 5.1, 6.8, 5.8,
6.7, 6.0, 5.7, 8.0, 8.2, 5.4, 7.2, 7.5, 7.0, 3.3, 6.0, 7.1, 5.4, 6.1, 5.3, 2.2,
7.0, 3.8, 6.9, 7.2, 7.3, 6.3, 7.5, 7.6, 6.8, 5.2, 7.7, 6.2, 7.7, 4.3, 6.9, 6.6,
7.0, 6.7, 8.2, 8.9, 8.7, 5.5, 5.7, 6.3, 5.9, 7.6, 6.6, 5.3, 6.0, 8.0, 5.6, 5.9,
7.3, 7.9, 6.8, 6.6, 6.6, 7.0, 7.0, 7.3, 5.5, 8.5, 7.5, 7.0, 7.8, 7.6, 7.6, 6.1,
6.8, 5.0, 7.1, 5.5, 5.6, 7.1, 4.9, 7.4, 5.7, 6.4, 5.9, 5.5, 6.9, 6.2, 7.0, 5.6,
7.0, 6.8, 5.4, 6.1, 6.7, 4.3, 6.9, 8.0, 4.4, 7.3, 6.3, 6.7, 7.7, 6.5, 7.8, 6.4,
7.8, 5.8, 7.1, 7.1, 8.6, 6.8, 4.8, 6.2, 6.9, 7.3, 6.6, 6.9, 6.2, 6.7, 7.6, 6.7,
6.2, 7.3, 6.0, 7.1, 7.1, 5.5, 7.8, 5.6, 7.5, 5.4, 4.3, 4.9, 7.1, 6.4, 6.9, 4.3,
6.1, 7.0, 7.7, 5.9, 6.7, 6.5, 7.1, 7.3, 6.5, 7.0, 6.8, 7.2, 6.4, 6.1, 6.7, 6.4,
4.4, 5.4, 6.5, 6.7, 8.1, 5.6, 6.3, 7.3, 6.1, 7.7, 6.4, 8.8, 6.8, 6.6, 7.2, 6.9,
5.2, 4.9, 6.3, 5.6, 5.5, 6.7, 7.6, 5.7, 4.6, 7.0, 5.2, 5.1, 6.6, 7.0, 6.7, 7.6,
7.3, 5.9, 5.6, 6.5, 5.9, 7.0, 5.3, 5.9, 6.3, 6.4, 6.9, 6.3, 7.3, 5.8, 5.2, 2.4,
5.7, 5.8, 5.6, 6.0, 5.8, 6.0, 5.7, 6.0, 7.8, 4.2, 5.6, 4.4, 8.2, 8.5, 5.8, 6.5,
7.2, 6.7, 3.4, 5.9, 7.8, 5.9, 4.1, 6.8, 5.8, 7.5, 6.9, 6.5, 6.9, 7.9, 7.4, 6.7,
7.4, 6.9, 6.8, 6.7, 5.1, 4.1, 7.3, 6.0, 7.3, 7.5, 5.4, 5.9, 7.1, 6.0, 6.5, 8.3,
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6.3, 6.3, 7.7, 7.0, 5.3, 5.6, 5.2, 5.4, 6.4, 5.9, 6.3, 6.5, 3.0, 3.6, 5.8, 6.2,
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7.5, 5.5, 7.6, 6.5, 6.9, 6.7, 6.6, 7.2, 6.4, 6.4, 6.0, 6.1, 6.0, 6.4, 6.4, 7.3,
5.2, 6.6, 6.3, 5.9, 6.4, 6.7, 5.4, 6.4, 6.7, 6.2, 6.1, 8.8, 7.1, 8.1, 5.7, 5.0,
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3.8, 5.9, 7.9, 6.3, 5.5, 7.7, 6.3, 7.1, 8.5, 5.9, 5.8, 8.1, 7.9, 7.2, 6.3, 8.1,
7.0, 5.5, 6.7, 5.2, 7.0, 6.1, 6.6, 5.5, 5.9, 5.4, 6.4, 5.7, 6.7, 7.1, 6.8, 6.5,
7.6, 5.5, 6.5, 7.0, 5.8, 7.3, 6.6, 4.4, 7.7, 5.0, 7.7, 4.4, 6.1, 5.4, 6.8, 6.5,
7.0, 6.3, 6.3, 6.1, 6.1, 7.3, 5.3, 5.4, 6.2, 6.6, 5.9, 6.3, 7.2, 6.8, 6.1, 7.8,
5.0, 6.2, 6.7, 4.9, 7.4, 7.1, 6.2, 4.9, 6.1, 6.1, 6.4, 6.3, 6.8, 6.6, 5.7, 5.9,
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7.4, 6.9, 5.5, 6.3, 4.7, 5.6, 6.4, 4.2, 6.4, 7.7, 7.7, 5.3, 6.7, 7.7, 5.7, 7.6,
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7.1, 6.9, 7.3, 7.0, 7.7, 6.7, 6.3, 5.8, 7.1, 7.3, 6.4, 7.1, 7.6, 6.8, 6.6, 6.7,
6.1, 6.0, 7.6, 7.1, 5.0, 7.1, 6.2, 5.6, 5.4, 7.4, 5.0, 5.2, 7.6, 6.6, 7.0, 5.7,
8.2, 6.2, 7.9, 6.6, 4.7, 6.3, 6.1, 6.7, 6.1, 7.0, 7.4, 7.3, 5.8, 6.7, 5.8, 7.8,
6.6, 6.5, 6.7, 7.3, 5.8, 5.5, 6.3, 7.4, 5.9, 6.2, 5.9, 6.5, 4.4, 3.5, 6.6, 6.0,
6.4, 6.5, 7.8, 4.3, 4.2, 6.5, 6.1, 6.3, 6.2, 5.9, 5.9, 6.5, 6.4, 6.5, 5.7, 7.5,
8.0, 7.3, 6.7, 7.5, 5.4, 6.6, 7.7, 5.8, 6.4, 5.6, 6.0, 6.2, 5.9, 5.1, 6.8, 7.0,
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6.0, 5.1, 5.8, 6.2, 6.4, 4.8, 4.9, 5.6, 5.5, 3.7, 5.9, 8.5, 6.3, 7.4, 7.6, 8.3,
6.6, 6.9, 6.7, 6.8, 4.6, 7.1, 6.4, 6.4, 7.4, 6.4, 6.0, 6.5, 7.8, 6.0, 7.0, 6.0,
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6.5, 6.4, 6.3, 5.9, 6.5, 6.5, 6.1, 5.9, 6.6, 7.4, 7.3, 6.6, 5.6, 5.3, 6.0, 5.4,
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1.7, 7.7, 7.8, 5.5, 7.5, 6.4, 5.6, 7.5, 6.8, 6.8, 6.0, 7.3, 6.0, 7.0, 5.1, 6.8,
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6.9, 8.5, 6.3, 5.9, 7.8, 6.7, 6.4, 5.9, 6.6, 6.8, 6.5, 6.6, 5.8, 6.9, 7.1, 5.8,
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8.4, 6.0, 7.6, 5.6, 6.9, 6.4, 5.1, 7.0, 5.7, 6.8, 6.7, 6.2, 7.2, 6.2, 5.6, 4.4,
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6.9, 7.2, 6.4, 6.4, 8.3, 7.2, 6.8, 6.5, 7.8, 7.6, 7.2, 6.7, 6.8, 6.3, 6.2, 6.2,
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7.5, 7.0, 7.2, 5.3, 8.7, 3.4, 5.4, 7.8, 6.7, 4.7, 6.3, 7.4, 6.1, 7.5, 6.3, 6.3,
6.8, 7.8, 6.9, 8.0, 7.8, 7.4, 6.1, 4.3, 3.5, 7.2, 4.7, 7.3, 7.9, 5.1, 7.2, 5.4,
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6.5, 5.7, 6.1, 7.7, 8.7, 4.3, 6.2, 3.3, 2.7, 5.2, 8.2, 6.1, 8.0, 5.5, 5.7, 3.7,
7.1, 7.8, 7.3, 4.1, 7.2, 7.7, 7.1, 7.6, 7.0, 5.5, 7.4, 7.7, 7.2, 7.8, 6.6, 6.0,
8.4, 6.5, 8.9, 7.9, 6.0, 6.1, 7.4, 6.2, 5.6, 7.2, 6.1, 3.8, 7.1, 4.5, 3.8, 6.2,
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6.8, 7.2, 7.4, 5.6, 6.8, 7.2, 7.7, 7.0, 7.2, 6.4, 7.2, 7.2, 6.2, 6.9, 6.2, 6.9,
7.0, 6.7, 3.6, 6.3, 7.4, 7.4, 7.3, 6.1, 6.7, 8.2, 7.7, 7.3, 7.4, 5.7, 7.6, 6.8,
5.6, 4.8, 6.4, 6.8, 6.1, 5.2, 6.9, 6.0, 6.3, 6.1, 5.5, 6.9, 5.6, 1.9, 4.1, 5.4,
6.8, 7.0, 6.7, 5.8, 6.2, 2.8, 7.3, 5.8, 6.5, 6.1, 5.1, 2.2, 7.2, 5.7, 3.4, 3.8,
4.7, 5.6, 3.9, 5.4, 5.2, 3.5, 5.3, 7.0, 7.1, 5.5, 5.9, 6.0, 4.8, 7.1, 8.2, 5.7,
7.9, 7.3, 7.1, 6.4, 5.9, 7.5, 6.4, 7.4, 7.3, 6.5, 7.2, 6.7, 7.1, 6.0, 6.7, 5.6,
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6.8, 6.5, 6.0, 7.3, 7.3, 6.5, 6.0, 5.3, 6.6, 6.1, 7.1, 8.7, 8.4, 5.8, 6.2, 5.8,
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    7.8, 6.7, 6.4, 7.3, 5.7, 7.0, 6.3, 7.1, 4.8, 3.3, 6.9, 4.6, 3.0, 6.6, 7.4, 6.2,
    4.0, 6.1, 6.9, 7.5, 6.7, 7.4, 6.1, 5.4, 6.4, 7.0, 6.3, 6.9, 7.8, 6.4, 7.7, 7.5,
    6.3, 6.3, 6.6]
[6]: df.shape
[6]: (5043, 28)
[7]: titles = l(df.get('movie_title'))
     print(titles)
           \Box
                                                       Traceback (most recent call
            NameError
     →last)
            <ipython-input-7-efb4f8d2a1db> in <module>
        ---> 1 titles = l(df.get('movie_title'))
              2 print(titles)
            NameError: name 'l' is not defined
[]: freq_title={}
     for t in titles:
         length = len(t)
         try:
             freq title[length] +=1
         except:
             freq_title[length] =1
     print(freq_title)
```

```
[]: X = np.array(list(freq_title.keys()))
Y = np.array(list(freq_title.values()))

[]: plt.scatter(X,Y)
    plt.xlabel("Movie Title len")
    plt.ylabel("No of Movies")
[]:
```