Практическая работа №8

Задание

Выполните задание с применением собственных функций на основе набора данных films.csv: Сколько суммарно вышло фильмов летом (за июнь, июль, август)?

Загружаем библиотеки и загружаем файл csv

```
import pandas as pd
import numpy as np

df = pd.read_csv('../films.csv')
```

Смотрим информацию о датафрейме

все ли столбцы заполнили, в каком формате значения в данных столбцах, как называются заголовки

```
In [3]:
       df.info()
      <class 'pandas.core.frame.DataFrame'>
      RangeIndex: 1890 entries, 0 to 1889
      Data columns (total 16 columns):
          Column
                             Non-Null Count Dtype
          -----
                              _____
                              1890 non-null object
       0
          imdb id
                              1890 non-null float64
       1
           popularity
       2
          budget
                              1890 non-null int64
          revenue
                              1890 non-null int64
       4 original title
                              1890 non-null object
                              1890 non-null object
       5
          cast
       6 director
                              1890 non-null object
       7 tagline
                              1890 non-null object
                              1890 non-null object
         overview
                             1890 non-null int64
          runtime
                             1890 non-null object
       10 genres
       11 production companies 1890 non-null object
                              1890 non-null object
       12 release date
       13 vote count
                              1890 non-null int64
       14 vote average
                              1890 non-null float64
                                             int64
       15 release year
                              1890 non-null
      dtypes: float64(2), int64(5), object(9)
      memory usage: 236.4+ KB
```

Изменяем старый датафрейм оставляя фильмы только летом

```
In [28]:
Out[28]:
                    imdb_id popularity
                                             budget
                                                          revenue original_title
                                                                                               cast
                                                                                                       director
                                                                                                                    tagline
                                                                                                                               overvi
                                                                                   Chris Pratt|Bryce
                                                                                                                              Twenty-t
                                                                         Jurassic
                                                                                             Dallas
                                                                                                          Colin The park is
                                                                                                                               years at
               0 tt0369610 32.985763 150000000 1513528810
                                                                           World
                                                                                      Howard|Irrfan
                                                                                                     Trevorrow
                                                                                                                     open.
                                                                                                                               the eve
                                                                                          Khan|Vi...
                                                                                                                             of Jurassi
```

| | imdb_id | popularity | budget | revenue | original_title | cast | director | tagline | overvi |
|------|-----------|------------|-----------|------------|---|---|---------------------|---|--|
| 1 | tt1392190 | 28.419936 | 150000000 | 378436354 | Mad Max: Fury Road | Tom Hardy Charlize Theron Hugh Keays-Byrne Nic | George Miller | What a Lovely Day. | apocalyr story se the furth reac |
| 2 | tt2908446 | 13.112507 | 110000000 | 295238201 | Insurgent | Shailene Woodley Theo James Kate Winslet Ansel | Robert Schwentke | One Choice Can Destroy You | Beatr Prior m confront in demon |
| 3 | tt2488496 | 11.173104 | 200000000 | 2068178225 | Star Wars: The Force Awakens | Harrison Ford Mark Hamill Carrie Fisher Adam D | J.J. Abrams | Every generation has a story. | Thirty ye af defeat the Galad Eml |
| 4 | tt2820852 | 9.335014 | 190000000 | 1506249360 | Furious 7 | Vin Diesel Paul Walker Jason Statham Michelle | James Wan | Vengeance Hits Home | Decki Shaw sei rever agai Domi To |
| ••• | | | | | | | | | |
| 1885 | tt0120903 | 0.182246 | 75000000 | 157299717 | X-Men | Patrick Stewart Hugh Jackman lan McKellen Hall | Bryan Singer | Evolution Begins | T mutar Rogue a Wolveri come t |
| 1886 | tt0192255 | 0.123920 | 22000000 | 13555988 | The Little Vampire | Richard E. Grant Jonathan Lipnicki Jim Carter | Uli Edel | They're not just best friends, they're blood b | Based the popul books, the story to |
| 1887 | tt0131704 | 0.104908 | 76000000 | 35134820 | The Adventures of Rocky & Bullwinkle | Rene Russo Jason Alexander Piper Perabo Randy | Des McAnuff | This summer it's not the same old bull. | Rocky a Bullwin have be living off |
| 1888 | tt0162983 | 0.031018 | 40000000 | 36037909 | Hanging Up | Meg Ryan Diane Keaton Lisa Kudrow Walter Matth | Diane Keaton | Every family has a few hang-ups. | A tric sisters bc over th ambivaler |
| 1889 | tt0163676 | 0.015997 | 15000000 | 5217498 | The In Crowd | Susan Ward Lori Heuring Matthew Settle Nathan | Mary Lambert | What would you do to get in? | A menta disturk you won takes a j |

1890 rows × 16 columns

b = len(df.loc[df['release_date'].str[:1] == '8'])