

## Pandas Exercises II

Olatz Perez de Viñaspre and Ander Soraluze

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### Abstract

This is the second batch of exercises to practise with Pandas library. Write python programs to answer the questions presented below. Firstly, download from e-gela the data files releases\_dates.csv and cast.csv. Use the code below to create the DataFrames needed to answer the questions. Upload to e-gela the code written.

```
cast = pd.read_csv('cast.csv', index_col=None)

release_dates = pd.read_csv('release_dates.csv', index_col=None,
                             parse_dates=['date'], infer_datetime_format=True)

titles = cast[['title', 'year']].drop_duplicates().reset_index(drop=True)
```

## 1 Questions

1. How many movies are listed in the 'titles' dataframe?
2. What is the name and year of the very first movie ever made?
3. How many movies listed in 'titles' came out in 1950?
4. How many movies came out in 1960?
5. How many movies came out in each year of the 1970s? (Hint: try a "for" loop or use groupby)
6. How many movies came out during your own lifetime, from the year of your birth through 2014?
7. What movies have titles that fall between **Star Trek** and **Star Wars** in the alphabet?
8. How many movies did **Aaron Abrams** appear in?
9. In how many of his movies was **Aaron Abrams** the lead ('n==1')?
10. List the movies, sorted by year, in which **Aaron Abrams** starred as lead actor.
11. What are the 15 most common movie titles in film history? (Hint: you can use value\_counts function)
12. What are the 11 most common character names in movie history?
13. Which actors have played the role **Zombie** the most times?
14. Save titles DataFrame in a file named titles.csv



Create a 'cast\_by\_title\_year' dataframe indexed by title and year to use in the next few questions.

```
cast_by_title_year = cast.set_index(['title', 'year']).sort_index()
```

15. Use 'cast\_by\_title\_year' to find the stars of the film **Hamlet** and order them by 'n' before displaying the top 10.
16. Use 'cast\_by\_title\_year' to find the first 10 stars in the 1996 film **Hamlet**, and order them by 'n'.
17. How many people were cast in each of the movies named **Hamlet**?