4_exercises.md 2023-10-17

4 - Pandas - Lab Exercises

Create a new cell for each question. You will need the file movie_dataset.csv from Moodle. Whilst each question has a single correct solution/answer, there may be multiple ways to arrive to it.

Section 1

Exercise 1.1

Use Pandas to load the file movie_dataset.csv. Assign it to a variable called movies.

Exercise 1.2

Find out some basic information about movies. How many rows of data are there, how many columns? Are there columns that have missing data for some rows?

Exercise 1.3

What are the names of the columns between vote_average and crew?

Exercise 1.4

What are the first and last movies listed in the dataset?

Exercise 1.5

Sort the dataset by budget. Which is the film with the largest budget? By default Pandas will sort lowest to highest, but can you find a way to reverse this behaviour? Try Googling or looking at the Pandas documentation for the solution.

Exercise 1.6

What is the tagline for the film at index 3002?

Section 2

Note: Make sure you still have your movies variable loaded. If not, repeat Exercise 1.1 before continuing.

Exercise 2.1

How many documentaries are in our movies dataset? Start by looking at the genres column.

Exercise 2.2

How many documentaries were originally in French? You'll need both the genres and original_language columns.

Exercise 2.3

4_exercises.md 2023-10-17

How many films in our dataset had above average budget but below average revenue?

Exercise 2.4

Using the filtered data from Exercise 2.3, can you identify the movie with the highest budget, and the movie with the lowest revenue?