

Squadcast Programming Challenge: Movie CSV Parsing (Qualifier 2)

Hello Challenger,

Congrats on clearing the first round! For the second part of our hiring process, you will be tested on your ability to pick up a new programming language & navigating documentation. You get **180 minutes** to register yourself and solve the question.

Instructions

1. You will need to solve this using Golang. No other programming language is permitted. Here are a few resources to help:
 - <https://tour.golang.org/list>
 - <https://gobyexample.com/>
2. Go to <https://replit.com> and create a free account.
3. Go to <https://replit.com/@Mohammad-Muazam/Squadcast-Round-2#main.go> and click the Fork button in the top right corner. This is your fresh copy of the repl where you can start writing code. Add your name and registration number in the name of the forked repl.
4. Fill up our registration form here: <https://forms.gle/a7HnJzzZc5TvPLAH8> with your repl link.
5. You will be added to a Round 2 channel on Discord. If you have a question or encounter a bug, please contact one of our admins.

Problem Statement

Write a program in Golang that parses the given CSV files to find the following insights:

1. Sort and print top 5 movies titles based on (if there's a tie, sort it by movie title):
 - a. Duration

```
Jodha Akbar; Duration In Minutes: 332
Gone with the Wind; Duration In Minutes: 300
Once upon a time in america; Duration In Minutes: 290
Misery; Duration In Minutes: 250
Interstellar; Duration In Minutes: 245
```

- b. Year of release

```
10 Minutes; Year of Release: 2015
7 Lives; Year of Release: 2015
Tomorrow Never Dies; Year of Release: 2015
You; Year of Release: 2015
No Time To Die; Year of Release: 2014
```

- c. Average rating (consider movies with minimum 5 ratings)

```
10 Minutes; Average Rating: 9.900
7 Lives; Average Rating: 9.850
Tomorrow Never Dies; Average Rating: 9.770
You; Average Rating: 9.600
No Time To Die; Average Rating: 9.550
```

- d. Number of ratings given

```
10 Minutes; Nmber of Ratings: 88
7 Lives; Nmber of Ratings: 79
Tomorrow Never Dies; Nmber of Ratings: 65
You; Nmber of Ratings: 57
No Time To Die; Nmber of Ratings: 52
```

2. Print Number of unique raters

```
Unique Raters: 3829
```

3. Sort and print top 5 rater IDs based on: (On tie sort by Rater ID in ascending order)

- a. Most movies rated

```
Rater ID: 92; Average Rating: 10.00
Rater ID: 98; Average Rating: 10.00
Rater ID: 101; Average Rating: 10.00
Rater ID: 12; Average Rating: 9.90
Rater ID: 32; Average Rating: 9.00
```

- b. Highest Average rating given (consider raters with min 5 ratings)

```
Rater ID: 101; Number of Ratings: 234
Rater ID: 92; Number of Ratings: 221
Rater ID: 12; Number of Ratings: 200
Rater ID: 32; Number of Ratings: 175
Rater ID: 98; Number of Ratings: 123
```

4. Print Top Rated movie: (consider movies with minimum 5 ratings)

- a. By Director 'Michael Bay'

```
Lord Of The Rings; Average Rating: 8.900
```

- b. In 'Comedy'

The Hangover; Average Rating: 8.850

- c. In year 2013

Vacation; Average Rating: 8.700

- d. In country India

Rang De Basanti; Average Rating: 9.120

5. Find the favorite movie *Genre* of the Rater with ID **1040**: (Favorite movie genre is defined as the genre of movie the rater has rated most number of times)

Comedy; Favourite Genre Number of Ratings: 22

6. Find the highest average rating for a movie genre given by the rater with ID 1040: (Consider genres with at least 5 ratings)

Comedy; Average Rating: 10.00

7. Which year had the second-highest number of action movies from the USA that received an average rating of 6.5 or higher and had a runtime of less than 120 minutes?

2017; Number of movies: 24

8. Count the number of movies that have received at least five reviews with a rating of 7 or higher.

Number of movies: 223

Note: The above output snippets are just the examples, they do not conform with the real datasets.