

## Questions

### 1.1 Question a

Find the number of Animation movies that were released in 1995. No need to remove duplicates. (Output headers: None)

### 1.2 Question b

Find distinct user ids under age 15 who have watched at least 2 different horror movies (i.e., genre is Horror), ordered by user id (ascending). (Output headers: user id)

### 2.1 Question a

Add a new column “summary” in the movies table. The values of the column should be populated as below.

rating >= 4	=>	great
2 <= rating < 4	=>	ok
rating < 2	=>	bad

After modifying the schema, please output the count of each value as an array and sort by count(ascending). Hint: Use \$group in aggregation.

### 2.2 Question b

Find the top-20 movies in Adventure which have the highest average rating that are rated by at least 100 users. (Header: average\_rating, movie\_title)

**NOTE:** Add .toArray() to the end of your query and submit your codes in a file named b.js.

### 2.3 Question c

Find the number of reviews varied in each year in each of the 3 summary categories: “great”, “ok”, “bad”. Sort your result by year(ascending) and summary(descending). Only display the first 100 documents. Use release\_date to get the year of a given review. (Hints: \$addFields outputs documents that contain all existing fields from the input documents and newly added fields. It does not update the schema of your collection. \$substr extract a substrings based on a the start index and length.)

**NOTE:** Add .toArray() to the end of your query