

Hwk9 Yixiao Chen 002198256

1. Write a filter to return all films (type is movie) having the title **"Titanic"**.
`{type: "movie", title: "Titanic"}`
2. How many records are returned for question 1?
`2`
3. Write a filter that returns all the films (type is movie) that are directed by **"Jean Negulesco"**?
`{type: "movie", directors: "Jean Negulesco"}`
4. How many records are returned for question 3?
`8`
5. Write a filter that returns all the films (type is movie) that are directed by **"Jean Negulesco"** and has a rated field value **"APPROVED"**?
`{type: "movie", directors: "Jean Negulesco", rated: "APPROVED"}`
6. How many records are returned for question 5?
`2`
7. Write a filter to return all films (type is movie).
`{type: "movie"}`
8. How many records are returned for question 7?
`23276`
9. Write a filter that returns all films (type is movie) that have a rating of **"APPROVED"** or a rating of **"NOT RATED"**?
`{type: "movie", $or: [{rated: "APPROVED"}, {rated: "NOT RATED"}]}`
10. How many records are returned for question 9?
`2051`
11. Write a filter that returns all films (type is movie) that have a rating of **"APPROVED"** or a rating of **"NOT RATED"** and directed by **"Jean Negulesco"**?
`{type: "movie", $or: [{rated: "APPROVED", directors: "Jean Negulesco"}, {rated: "NOT RATED", directors: "Jean Negulesco"}]}`
12. How many records are returned for question 11?
`3`
13. Write a filter to return all films (type is movie) that have **exactly** 2 languages.
`{type: "movie", languages: {$size: 2}}`

14. How many records are returned for question 13?

3640

15. Write a filter that returns all films (type is movie) that have **more than 1** language.

```
{type: "movie",  
$nor: [{languages: {$exists: false}}, {languages: {$size: 0}}, {languages: {$size: 1}}]}
```

Better approach:

```
{type: "movie", "languages.1": {$exists: true}}
```

16. How many records are returned for question 15?

6021

17. Write a filter to return all film (type is movie) that have an **IMDB rating > 9.1**

```
{type: "movie", "imdb.rating": {$gt: 9.1}}
```

18. How many records are returned for question 17?

5

19. Write a filter to return all films (type is movie) that has a **rotten tomatoes viewer rating > 4**?

```
{type: "movie", "tomatoes.viewer.rating": {$gt: 4}}
```

20. How many records are returned for question 19?

1952