Exercise 6.1 – Use CQL to Query on Search Index

In the previous exercise, you created a search index on every field of the videos table and you used the Solr UI to query via the search index. Now you will utilize CQL to search via the search index.

In this exercise, you will:

- Understand the concept of executing search queries from within cqlsh.
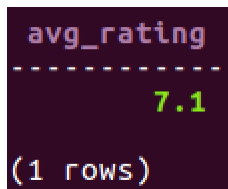- See how different types of searches are impacted by how you set up the index.

Step 1:

Here we are going to execute a simple and straightforward query. You should get the same results from both searches.

1. Open `cqlsh` and execute the following:

```
SELECT avg_rating FROM killrvideo_test.videos WHERE title LIKE 'Enter The
Dragon';
SELECT avg_rating FROM killrvideo_test.videos WHERE solr_query =
'title:"Enter The Dragon"';
```

2. This will return the rating of **7.1** as shown below.

Step 2:

1. To find the title of all of the movies in the *Animation* genre, execute the following inside `cqlsh`.

```
SELECT genres, title FROM killrvideo_test.videos WHERE genres CONTAINS
'Animation';
SELECT title FROM killrvideo.videos
WHERE solr_query = '{"q":"genres:Animation"}';
```

2. This code displays the following search results.

3. Now execute the query using *solr_query*. You should get the same result.

```
SELECT title FROM Killrvideo_test.videos WHERE solr_query =
'genres:Animation';
```

Step 3:

As you will recall from the first exercise, we set the data type of the search field for *mpaa_rating* to *TextField*. This will cause a clause with *solr_query* to function in the same manner as a LIKE clause. We'll examine this in the following query.

1. To find the title and MPAA rating of movies that are classified as rated *PG*, execute the following query inside `cqlsh`.

```
SELECT title, mpaa_rating FROM killrvideo_test.videos WHERE mpaa_rating
LIKE 'PG';
SELECT title, mpaa_rating FROM killrvideo_test.videos WHERE solr_query =
'mpaa_rating:PG';
SELECT title, mpaa_rating FROM killrvideo_test.videos WHERE solr_query =
'{"q": "mpaa_rating:PG"}';
```

Although the search query does return movies that are rated PG, it also returns movies that are rated PG-13, which is not expected given that we explicitly searched for PG. This would not have happened had we set the data type to *StrField*. So, in your own code be sure to set the data types according to the kind of searches you wish to execute.