

Exercise 3 – Partitions

In this exercise, you will:

- Experiment with partitions

Steps

NOTE: Be sure Apache Cassandra™ is running before doing these exercises. You can check by running `dsetool` on the command line:

```
/home/ubuntu/node/bin/dsetool status
```

- 1) Start the CQL command shell at the command line:

```
/home/ubuntu/node/resources/cassandra/bin/cqlsh
```

- 2) Switch to the `killrvideo` keyspace via the `USE` command:

```
USE killrvideo;
```

- 3) Execute the following command to view the metadata for the `videos` table you created earlier.

```
DESCRIBE TABLE videos;
```

- What is the partition key?
- How many partitions are in this table?

- 4) Execute the following query to view the partitioner token value for each video id.

```
SELECT token(video_id), video_id  
FROM videos;
```

- 5) Exit `cqlsh` and use the following command to inspect the file named `/home/ubuntu/labwork/data-files/videos-by-tag.csv`:

```
cat /home/ubuntu/labwork/data-files/videos-by-tag.csv
```

NOTE: Notice this CSV file categorizes the videos by one of two tags: cassandra or datastax.

- 6) Restart cqlsh and switch to the killrvideo keyspace.
- 7) Your mission, should you choose to accept it, is to write a CREATE TABLE statement that will store this data partitioned by tags. With this given data set, there should be two partitions, one for each tag. Call your table videos_by_tag.
- 8) Execute the following COPY command to import the videos-by-tag.csv data.

```
COPY videos_by_tag(tag, video_id, added_date, title)
FROM '/home/ubuntu/labwork/data-files/videos-by-tag.csv'
WITH HEADER = TRUE;
```

- 9) Verify CQL imported your data correctly by writing a SELECT * command.

```
SELECT *
FROM videos_by_tag;
```

- Note that if the table only contains 2 records, the primary key may be wrong - containing only the tag field - be sure to include the video_id as a cluster column.
- 10) Write a SELECT statement to retrieve all rows tagged with cassandra.
 - 11) Now, find all videos tagged with datastax (similar to the previous query).
 - 12) Finally, write a query to retrieve the video having a title of Cassandra Intro.