

## Homework 7

## QUESTIONS:

1. In step 4 of the lab, you spun up a VM running Cassandra. What is your deployment name?  
**cassandra-1**
2. In what GCP zone is it running?  
**us\_central1-f**
3. How many CPUs in your VM?  
**2 vCPUs**
4. How much memory did it allocate to your VM? Page 3  
**4 GB memory**
5. What is the IP address of your VM?  
**Default(10.125.0.0/20)**
6. What command do you enter to connect to the Cassandra shell? What was your username and password?  
**cqlsh -u cassandra -p WzXRTJL2Fhq3**
7. What is the name of the keyspace you created?  
**space\_flights**
8. What is the name of the table you created?  
**space\_flights.catalog**
9. What is the replication factor for the keyspace you created? In the instructions it told you to exit the cqlsh. If you have time remaining (out of your 30 minutes lab) go back to the SSH dropdown, open a new cqlsh terminal, log in again.  
replication factor: **1**
10. Run the query: "Select \* from space\_flights.catalog;" again

```
cassandra@cqlsh> Select * from space_flights.catalog;
```

spacecraft_name	journey_id	active	end	start
	summary			
mercury-atlas7	e9d69600-9685-11a9-8080-808080808080	False	1962-05-24 18:41:00.000000+0000	1962-05-24 13:45:00.000000+0000
	First mannal retrofire. Earth photography and study of liquids in weightless conditions.			
mercury-redstone4	2d2f1800-a53c-11a8-8080-808080808080	False	1961-07-21 12:35:00.000000+0000	1961-07-21 2:20:00.000000+0000
	Second American manned suborbital flight (altitude 118.26mi, 190km).			
mercury-atlas6	8c7b3200-4d82-11a9-8080-808080808080	False	1962-02-20 20:42:00.000000+0000	1962-02-20 5:47:00.000000+0000
	First American manned orbital flight. Completed three orbits.			
mercury-atlas8	977b6200-fe3b-11a9-8080-808080808080	False	1962-10-03 22:28:00.000000+0000	1962-10-03 3:15:00.000000+0000
	First flawless Mercury mission.			
vostok3	ff31b400-d46d-11a9-8080-808080808080	False	1962-08-15 06:52:00.000000+0000	1962-08-11 8:30:00.000000+0000
	First instance of two manned spacecraft in orbit simultaneously.			
mercury-redstone3	2396fc00-68cd-11a8-8080-808080808080	False	1961-05-05 14:49:00.000000+0000	1961-05-05 4:34:00.000000+0000
	First American manned suborbital spaceflight (altitude 187 kilometres, 116 miles).			
vostok2	5c2ac800-b191-11a8-8080-808080808080	False	1961-08-07 05:01:00.000000+0000	1961-08-06 5:00:00.000000+0000
	Day-long flight. Completed 17 Earth orbits. Brief manual control by pilot.			
vostok1	805b1a00-5673-11a8-8080-808080808080	False	1961-04-12 07:55:00.000000+0000	1961-04-12 6:07:00.000000+0000
	First manned spaceflight. Completed one Earth orbit.			
vostok4	403fec00-d533-11a9-8080-808080808080	False	1962-08-15 06:59:00.000000+0000	1962-08-12 8:02:00.000000+0000
	First instance of two manned spacecraft in orbit simultaneously.			

(9 rows)

11. Modify the query: "select count(\*) from space\_flights.catalog;" How many rows are in the table?

```
select count(spacecraft_name) as count from space_flights.catalog;
```

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12. Run the query: "select spacecraft\_name, journey\_id from space\_flights.catalog;"

```
cassandra@cqlsh> select spacecraft_name, journey_id from
... space_flights.catalog;
```

spacecraft_name	journey_id
mercury-atlas7	e9d69600-9685-11a9-8080-808080808080
mercury-redstone4	2d2f1800-a53c-11a8-8080-808080808080
mercury-atlas6	8c7b3200-4d82-11a9-8080-808080808080
mercury-atlas8	977b6200-fe3b-11a9-8080-808080808080
vostok3	ff31b400-d46d-11a9-8080-808080808080
mercury-redstone3	2396fc00-68cd-11a8-8080-808080808080
vostok2	5c2ac800-b191-11a8-8080-808080808080
vostok1	805b1a00-5673-11a8-8080-808080808080
vostok4	403fcc00-d533-11a9-8080-808080808080

(9 rows)

13. Modify your query to select all the rows where the spacecraft\_name is like "%mercury%". What happens? (Not all SQL commands will work in CQL). See

[https://docs.datastax.com/en/archived/cql/3.3/cql/cql\\_reference/cqlSelect.html](https://docs.datastax.com/en/archived/cql/3.3/cql/cql_reference/cqlSelect.html)

**It gives an error if we try using the LIKE command. That command is not supported in CQL. I tried this modified query:**

```
select spacecraft_name, journey_id from space_flights.catalog where spacecraft_name = '
"%mercury%"' ALLOW FILTERING ;
```

**I could not get any similar result (only result was empty value)**

14. Modify your query to try to sort the output using a "ORDER BY". What happens?

**CQL does support SQL order by, so it does not produce an error when run.**

```
select spacecraft_name, journey_id from space_flights.catalog where spacecraft_name
= "%mercury%" ORDER BY journey_id ;
```