

1. In step 4 of the lab, you spun up a VM running Cassandra. What is your deployment name?

The deployment name is cassandra-1.

2. In what GCP zone is it running?

us-central1-c

3. How many CPUs in your VM?

2 vCPUs

4. How much memory did it allocate to your VM?

4GB

5. What is the IP address of your VM?

10.128.0.0

6. What command do you enter to connect to the Cassandra shell? Username? Password?

The username is Cassandra and the password is vrEdxDXQLn2B.

```
cqlsh -u cassandra -p vrEdxDXQLn2B
```

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?

The replication factor is 1.

```
'replication factor': '1'
```

| spacecraft_name | journey_id | active | end | start | summary |
|--|--------------------------------------|--------|---------------------------------|---------------------------------|---|
| mercury-atlas7 | a9d69600-9685-11a9-8080-808080808080 | False | 1962-05-24 18:41:00.000000+0000 | 1962-05-24 13:45:00.000000+0000 | First manual retrofire. Earth photography and s |
| 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 12:20:00.000000+0000 | Second American manned subo |
| rbital flight (altitude 118.26mi, 190km). | | | | | |
| mercury-atlas6 | 8c7b3200-4d82-11a9-8080-808080808080 | False | 1962-02-20 20:42:00.000000+0000 | 1962-02-20 15:47:00.000000+0000 | First American manne |
| d orbital flight. Completed three orbits. | | | | | |
| mercury-atlas8 | 977b6200-fe3b-11a9-8080-808080808080 | False | 1962-10-03 22:28:00.000000+0000 | 1962-10-03 13:15:00.000000+0000 | |
| First flawless Mercury mission. | | | | | |
| vostok3 | ef31b400-d46d-11a9-8080-808080808080 | False | 1962-08-15 06:52:00.000000+0000 | 1962-08-11 08:30:00.000000+0000 | First instance of two m |
| anned spacecraft in orbit simultaneously. | | | | | |
| mercury-redstone3 | 2396fc00-68cd-11a8-8080-808080808080 | False | 1961-05-05 14:49:00.000000+0000 | 1961-05-05 14:34:00.000000+0000 | First American manned suborbital spacefli |
| ght (altitude 187 kilometres, 116 miles). | | | | | |
| vostok2 | 5c2ac800-b191-11a8-8080-808080808080 | False | 1961-08-07 05:01:00.000000+0000 | 1961-08-06 05:00:00.000000+0000 | Day-long flight. Completed 17 Ear |
| th orbits. Brief manual control by pilot. | | | | | |
| vostok1 | 805b1a00-5673-11a8-8080-808080808080 | False | 1961-04-12 07:55:00.000000+0000 | 1961-04-12 06:07:00.000000+0000 | First manne |
| d spaceflight. Completed one Earth orbit. | | | | | |
| vostok4 | 403fcc00-d533-11a9-8080-808080808080 | False | 1962-08-15 06:59:00.000000+0000 | 1962-08-12 08:02:00.000000+0000 | First instance of two m |
| anned spacecraft in orbit simultaneously. | | | | | |

(9 rows)
cassandra@cqlsh> █

10. Run the query: "Select * from space_flights.catalog;" again

| spacecraft_name | journey_id | active | end | start | summary |
|--|--------------------------------------|--------|---------------------------------|---------------------------------|---|
| mercury-atlas7 | a9d69600-9685-11a9-8080-808080808080 | False | 1962-05-24 18:41:00.000000+0000 | 1962-05-24 13:45:00.000000+0000 | First manual retrofire. Earth photography and s |
| 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 12:20:00.000000+0000 | Second American manned subo |
| rbital flight (altitude 118.26mi, 190km). | | | | | |
| mercury-atlas6 | 8c7b3200-4d82-11a9-8080-808080808080 | False | 1962-02-20 20:42:00.000000+0000 | 1962-02-20 15:47:00.000000+0000 | First American manne |
| d orbital flight. Completed three orbits. | | | | | |
| mercury-atlas8 | 977b6200-fe3b-11a9-8080-808080808080 | False | 1962-10-03 22:28:00.000000+0000 | 1962-10-03 13:15:00.000000+0000 | |
| First flawless Mercury mission. | | | | | |
| vostok3 | ef31b400-d46d-11a9-8080-808080808080 | False | 1962-08-15 06:52:00.000000+0000 | 1962-08-11 08:30:00.000000+0000 | First instance of two m |
| anned spacecraft in orbit simultaneously. | | | | | |
| mercury-redstone3 | 2396fc00-68cd-11a8-8080-808080808080 | False | 1961-05-05 14:49:00.000000+0000 | 1961-05-05 14:34:00.000000+0000 | First American manned suborbital spacefli |
| ght (altitude 187 kilometres, 116 miles). | | | | | |
| vostok2 | 5c2ac800-b191-11a8-8080-808080808080 | False | 1961-08-07 05:01:00.000000+0000 | 1961-08-06 05:00:00.000000+0000 | Day-long flight. Completed 17 Ear |
| th orbits. Brief manual control by pilot. | | | | | |
| vostok1 | 805b1a00-5673-11a8-8080-808080808080 | False | 1961-04-12 07:55:00.000000+0000 | 1961-04-12 06:07:00.000000+0000 | First manne |
| d spaceflight. Completed one Earth orbit. | | | | | |
| vostok4 | 403fcc00-d533-11a9-8080-808080808080 | False | 1962-08-15 06:59:00.000000+0000 | 1962-08-12 08:02:00.000000+0000 | First instance of two m |
| anned spacecraft in orbit simultaneously. | | | | | |

(9 rows)

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

9 rows.

| |
|--|
| cassandra@cqlsh> select count(*) from space_flights.catalog; |
| count |
| ----- |
| 9 |
| (1 rows) |
| Warnings : |
| Aggregation query used without partition key |
| cassandra@cqlsh> █ |

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).

This command doesn’t work in CQL. We get an error.

```
cassandra@cqlsh> select spacecraft_name, journey_id from space_flights.catalog where spacecraft_name like %mercury%;
Invalid syntax at line 1, char 91
select spacecraft_name, journey_id from space_flights.catalog where spacecraft_name like %mercury%;
^
```

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

We get an error.

InvalidRequest: Error from server: code=2200 [Invalid query] message="ORDER BY is only supported when the partition key is restricted by an EQ or an IN."

```
cassandra@cqlsh> select spacecraft_name, journey_id from space_flights.catalog ORDER BY spacecraft_name;
InvalidRequest: Error from server: code=2200 [Invalid query] message="ORDER BY is only supported when the partition key is restricted by an EQ or an IN."
```