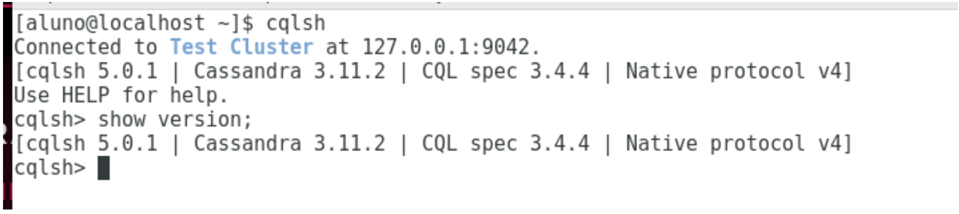
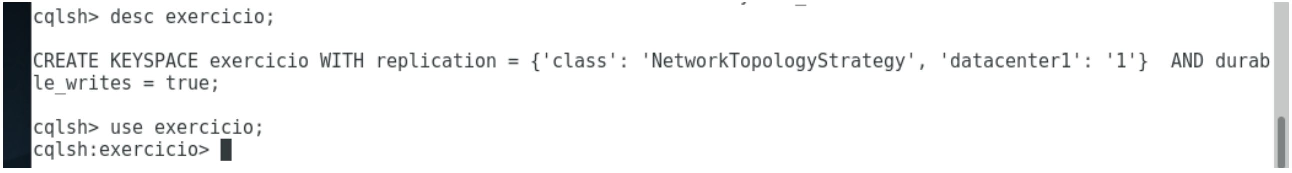
Para acessar o CQL execute o comando **cqlsh.**



```
[aluno@localhost ~]$ cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 3.11.2 | CQL spec 3.4.4 | Native protocol v4]
Use HELP for help.
cqlsh> show version;
[cqlsh 5.0.1 | Cassandra 3.11.2 | CQL spec 3.4.4 | Native protocol v4]
cqlsh>
```

```
----- Crie a keyspace
CREATE KEYSPACE exercicio WITH REPLICATION = { 'class' :
'NetworkTopologyStrategy', 'datacenter1' : 1 };


----- Para ver a descrição da keyspace
DESC exercicio;


------ Acesse a keyspace
use exercicio;
```

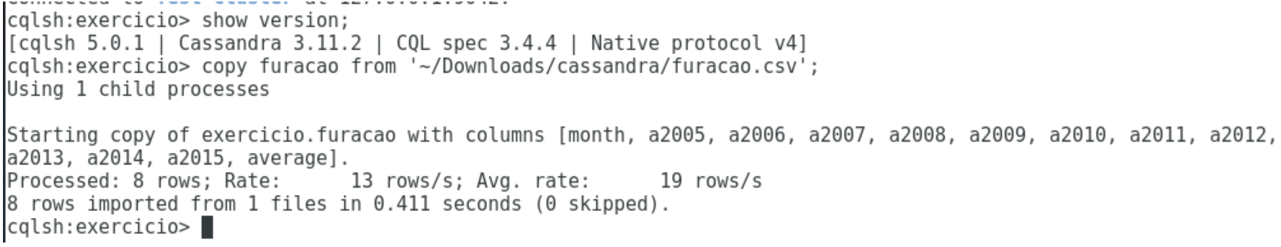
saída esperada:



```
cqlsh> desc exercicio;

CREATE KEYSPACE exercicio WITH replication = {'class': 'NetworkTopologyStrategy', 'datacenter1': '1'}  AND durab
le_writes = true;

cqlsh> use exercicio;
cqlsh:exercicio>
```

```
------ Crie a Tabela
CREATE TABLE furacao(Month text primary key, Average text, a2005 float, a2006
int, a2007 int, a2008 int, a2009 int, a2010 int, a2011 int, a2012 int, a2013
int, a2014 int, a2015 int);

CREATE TABLE casas(Sell int primary key, List int, Living int, Rooms float, Beds
int, Baths int, Age int, Acres float, Taxes int);


------ Crie os indexes para as tabelas

CREATE INDEX idx_a2005  ON exercicio.furacao (a2005);

CREATE INDEX idx_a2006 ON exercicio.furacao (a2006);

------ Importe os dados
COPY furacao FROM '~/Downloads/cassandra/furacao.csv';
```

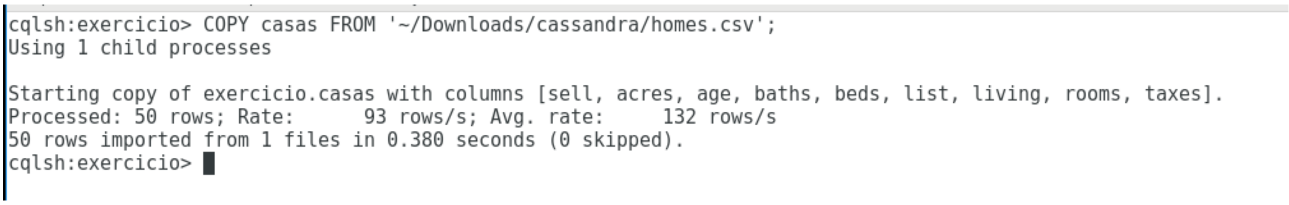
saída esperada:



```
cqlsh:exercicio> show version;
[cqlsh 5.0.1 | Cassandra 3.11.2 | CQL spec 3.4.4 | Native protocol v4]
cqlsh:exercicio> copy furacao from '~/Downloads/cassandra/furacao.csv';
Using 1 child processes

Starting copy of exercicio.furacao with columns [month, a2005, a2006, a2007, a2008, a2009, a2010, a2011, a2012,
a2013, a2014, a2015, average].
Processed: 8 rows; Rate:      13 rows/s; Avg. rate:      19 rows/s
8 rows imported from 1 files in 0.411 seconds (0 skipped).
cqlsh:exercicio>
```

```
COPY casas FROM '~/Downloads/cassandra/homes.csv';
```

saída esperada:



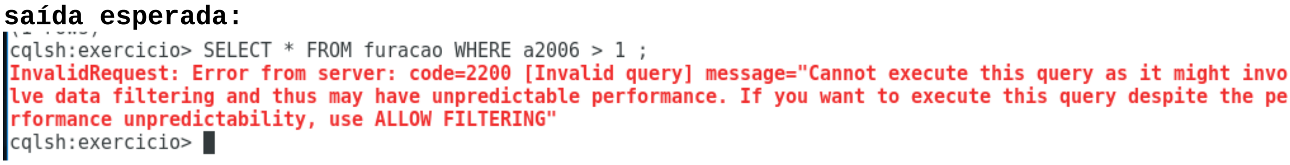
```
cqlsh:exercicio> COPY casas FROM '~/Downloads/cassandra/homes.csv';
Using 1 child processes

Starting copy of exercicio.casas with columns [sell, acres, age, baths, beds, list, living, rooms, taxes].
Processed: 50 rows; Rate:      93 rows/s; Avg. rate:     132 rows/s
50 rows imported from 1 files in 0.380 seconds (0 skipped).
cqlsh:exercicio> 
```

```
INSERT INTO casas (sell, acres, age, rooms) VALUES (112,321,4,0.89);
```

* Insira alguns registros nas tabelas **casas e furacao**. Tente adicionar registros repetidos, campos nulos e veja o resultado.

```
----- Faça as consultas abaixo
SELECT * FROM furacao;

SELECT * FROM furacao WHERE month = 'Aug';

SELECT * FROM  furacao WHERE a2006 > 1;
```

saída esperada:

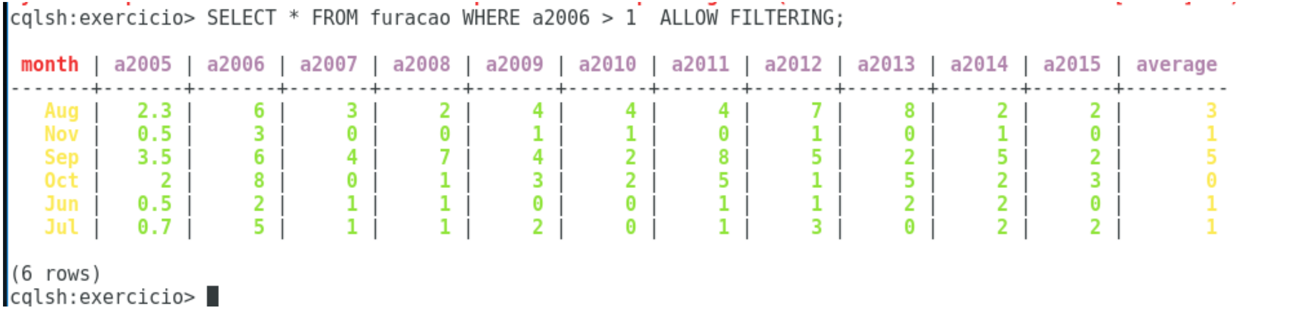


```
cqlsh:exercicio> SELECT * FROM furacao WHERE a2006 > 1 ;
InvalidRequest: Error from server: code=2200 [Invalid query] message="Cannot execute this query as it might invo
lve data filtering and thus may have unpredictable performance. If you want to execute this query despite the pe
rformance unpredictability, use ALLOW FILTERING"
cqlsh:exercicio> 
```

Obs.: Veja que o cassandra ao receber uma query que solicita uma busca maior nos datafiles, ele desencoraja o usuário. Porém pode-se usar o comando ALLOW FILTERING para avançar com a query.

```
SELECT * FROM furacao WHERE a2006 > 1 ALLOW FILTERING;
```

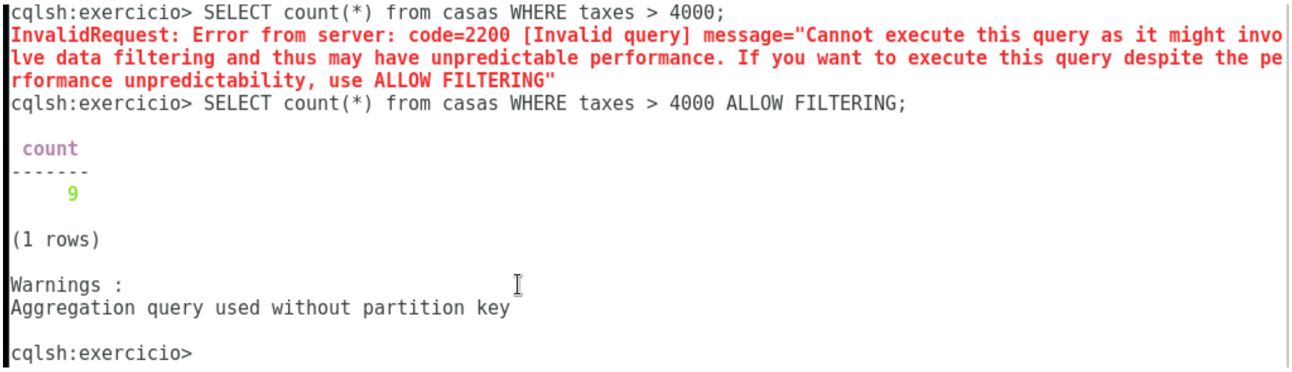
saída esperada:



```
cqlsh:exercicio> SELECT * FROM furacao WHERE a2006 > 1  ALLOW FILTERING;

 month | a2005 | a2006 | a2007 | a2008 | a2009 | a2010 | a2011 | a2012 | a2013 | a2014 | a2015 | average
-------+-------+-------+-------+-------+-------+-------+-------+-------+-------+-------+-------+---------
   Aug |   2.3 |     6 |     3 |     2 |     4 |     4 |     4 |     7 |     8 |     2 |     2 |       3
   Nov |   0.5 |     3 |     0 |     0 |     1 |     1 |     0 |     1 |     0 |     1 |     0 |       1
   Sep |   3.5 |     6 |     4 |     7 |     4 |     2 |     8 |     5 |     2 |     5 |     2 |       5
   Oct |     2 |     8 |     0 |     1 |     3 |     2 |     5 |     1 |     5 |     2 |     3 |       0
   Jun |   0.5 |     2 |     1 |     1 |     0 |     0 |     1 |     1 |     2 |     2 |     0 |       1
   Jul |   0.7 |     5 |     1 |     1 |     2 |     0 |     1 |     3 |     0 |     2 |     2 |       1

(6 rows)
cqlsh:exercicio> 
```

```
SELECT count(*) from casas WHERE taxes > 4000;

SELECT count(*) from casas WHERE taxes > 4000 ALLOW FILTERING;
```

saída esperada:



```
cqlsh:exercicio> SELECT count(*) from casas WHERE taxes > 4000;
InvalidRequest: Error from server: code=2200 [Invalid query] message="Cannot execute this query as it might invo
lve data filtering and thus may have unpredictable performance. If you want to execute this query despite the pe
rformance unpredictability, use ALLOW FILTERING"
cqlsh:exercicio> SELECT count(*) from casas WHERE taxes > 4000 ALLOW FILTERING;

 count
-------
     9

(1 rows)

Warnings :
Aggregation query used without partition key

cqlsh:exercicio>
```

Obs.: Manual https://docs.datastax.com/en/cql/3.1/