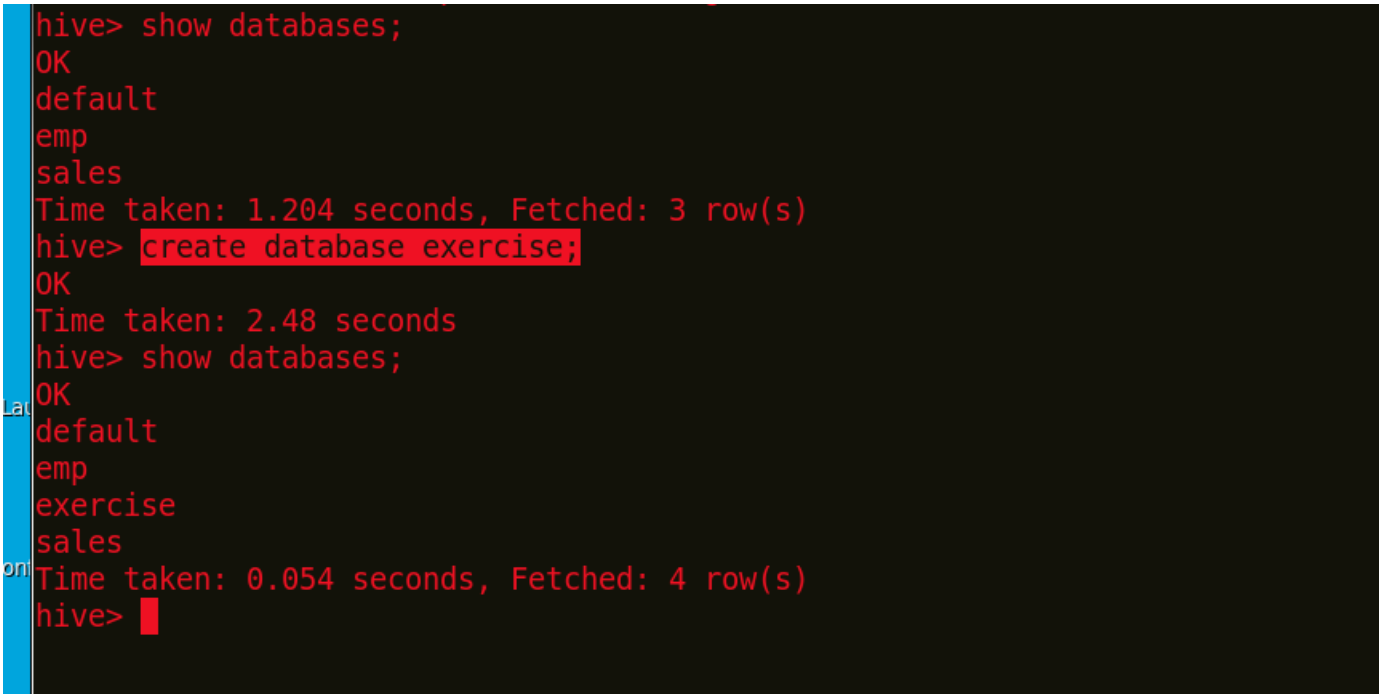
Hive Exercise 2 - Solutions

Create a new database called exercise

```
create database exercise;
```



In this newly created database, create an empty table named housing_price

First few lines of the csv

	status	bed	bath	acre_lot	city	state	zip_code	house_size	prev_sold_date	price
0	for_sale	3.0	2.0	0.12	Adjuntas	Puerto Rico	601.0	920.0	NaN	105000.0
1	for_sale	4.0	2.0	0.08	Adjuntas	Puerto Rico	601.0	1527.0	NaN	80000.0
2	for_sale	2.0	1.0	0.15	Juana Diaz	Puerto Rico	795.0	748.0	NaN	67000.0
3	for_sale	4.0	2.0	0.10	Ponce	Puerto Rico	731.0	1800.0	NaN	145000.0
4	for_sale	6.0	2.0	0.05	Mayaguez	Puerto Rico	680.0	NaN	NaN	65000.0
5	for_sale	4.0	3.0	0.46	San Sebastian	Puerto Rico	612.0	2520.0	NaN	179000.0
6	for_sale	3.0	1.0	0.20	Ciales	Puerto Rico	639.0	2040.0	NaN	50000.0
7	for_sale	3.0	2.0	0.08	Ponce	Puerto Rico	731.0	1050.0	NaN	71600.0
8	for_sale	2.0	1.0	0.09	Ponce	Puerto Rico	730.0	1092.0	NaN	100000.0
9	for_sale	5.0	3.0	7.46	Las Marias	Puerto Rico	670.0	5403.0	NaN	300000.0

```
CREATE TABLE IF NOT EXISTS housing_price (
    status STRING,
    bed FLOAT,
    bath FLOAT,
    acre_lot FLOAT,
    city STRING,
```

```
    state STRING,
    zip_code FLOAT,
    house_size FLOAT,
    prev_sold_date STRING,
    price FLOAT
)
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ','
STORED AS TEXTFILE
TBLPROPERTIES ("skip.header.line.count"="1");
```

Load data from the local CSV file into the Hive Table

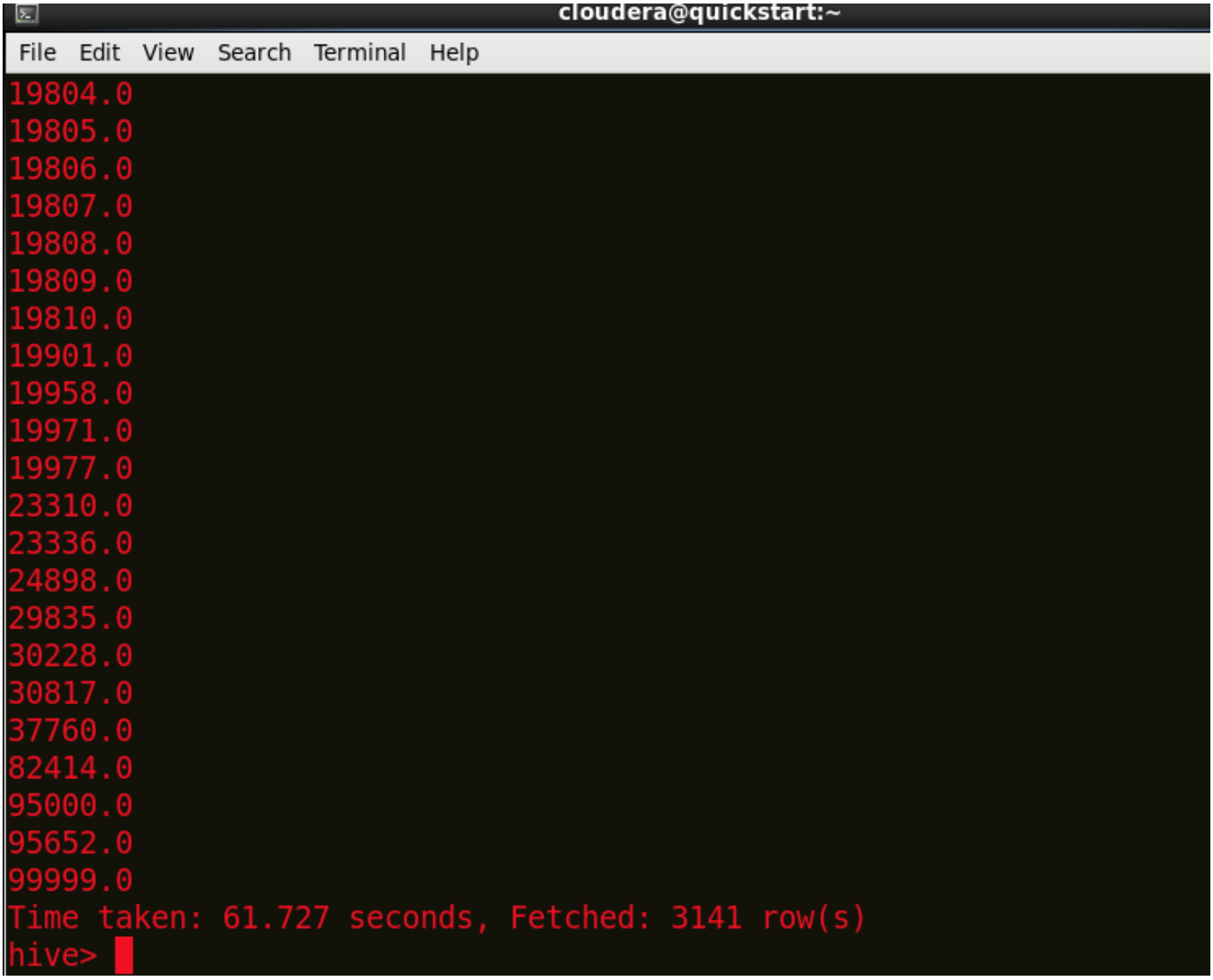
```
LOAD DATA LOCAL INPATH '/home/cloudera/Desktop/sf/realtor-data.csv' OVERWRITE INTO TABLE housing_price;
```

Display the first 5 rows of the table

```
SELECT * FROM housing_price LIMIT 5;
```

Get distinct zip codes from the dataset

```
SELECT DISTINCT zip_code FROM housing_price;
```



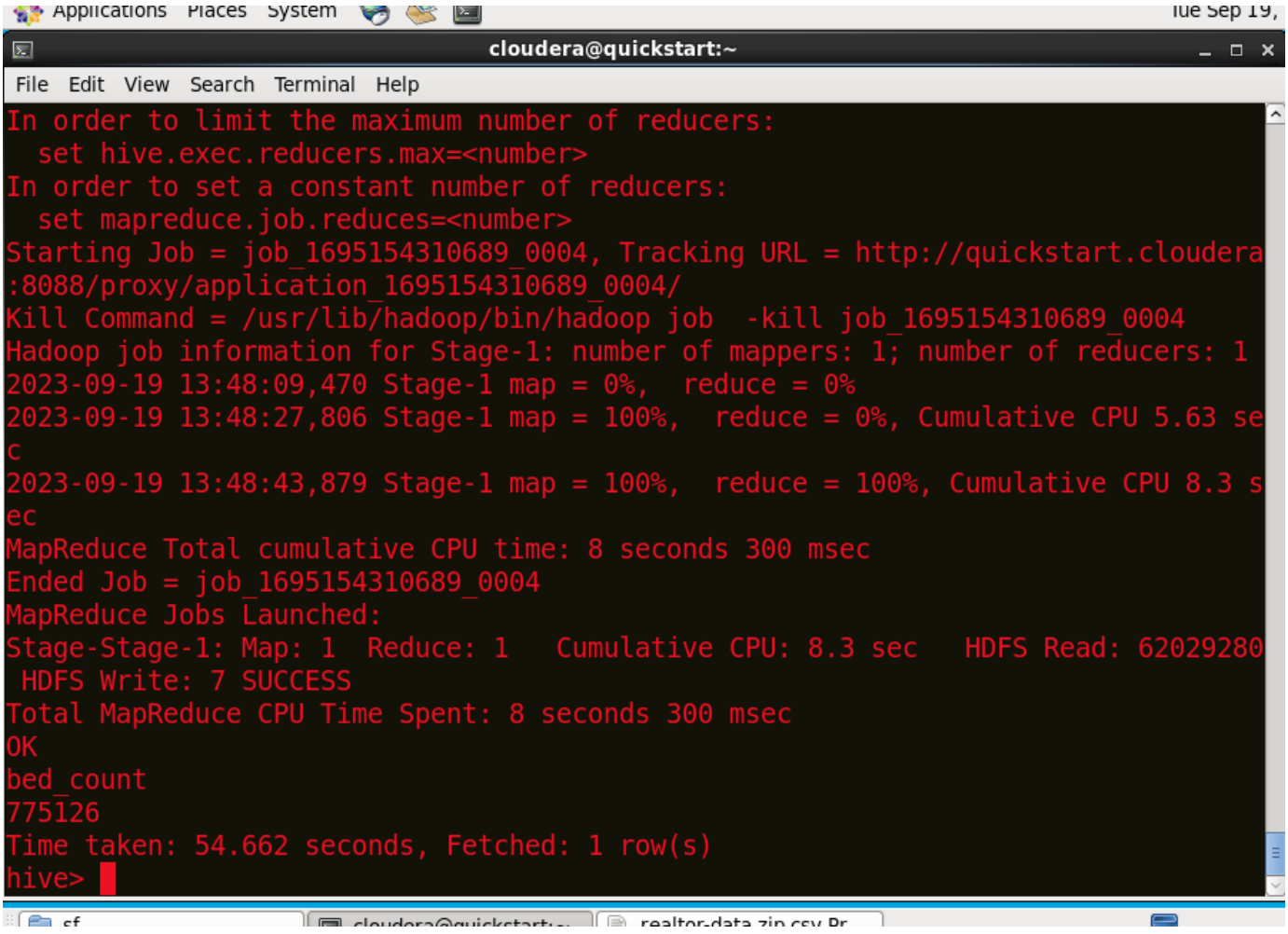
List the total number of records in the table

```
SELECT COUNT(*) AS total_records FROM housing_price;
```

```
:8088/proxy/application_1695154310689_0002/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1
Hadoop job information for Stage-1: number of mappers: 1;
2023-09-19 13:43:15,289 Stage-1 map = 0%,  reduce = 0%
2023-09-19 13:43:31,534 Stage-1 map = 100%,  reduce = 0%,
c
2023-09-19 13:43:46,598 Stage-1 map = 100%,  reduce = 100%
sec
MapReduce Total cumulative CPU time: 6 seconds 610 msec
Ended Job = job_1695154310689_0002
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 6.61 se
6 HDFS Write: 7 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 610 msec
OK
total_records
904966
Time taken: 50.43 seconds, Fetched: 1 row(s)
```

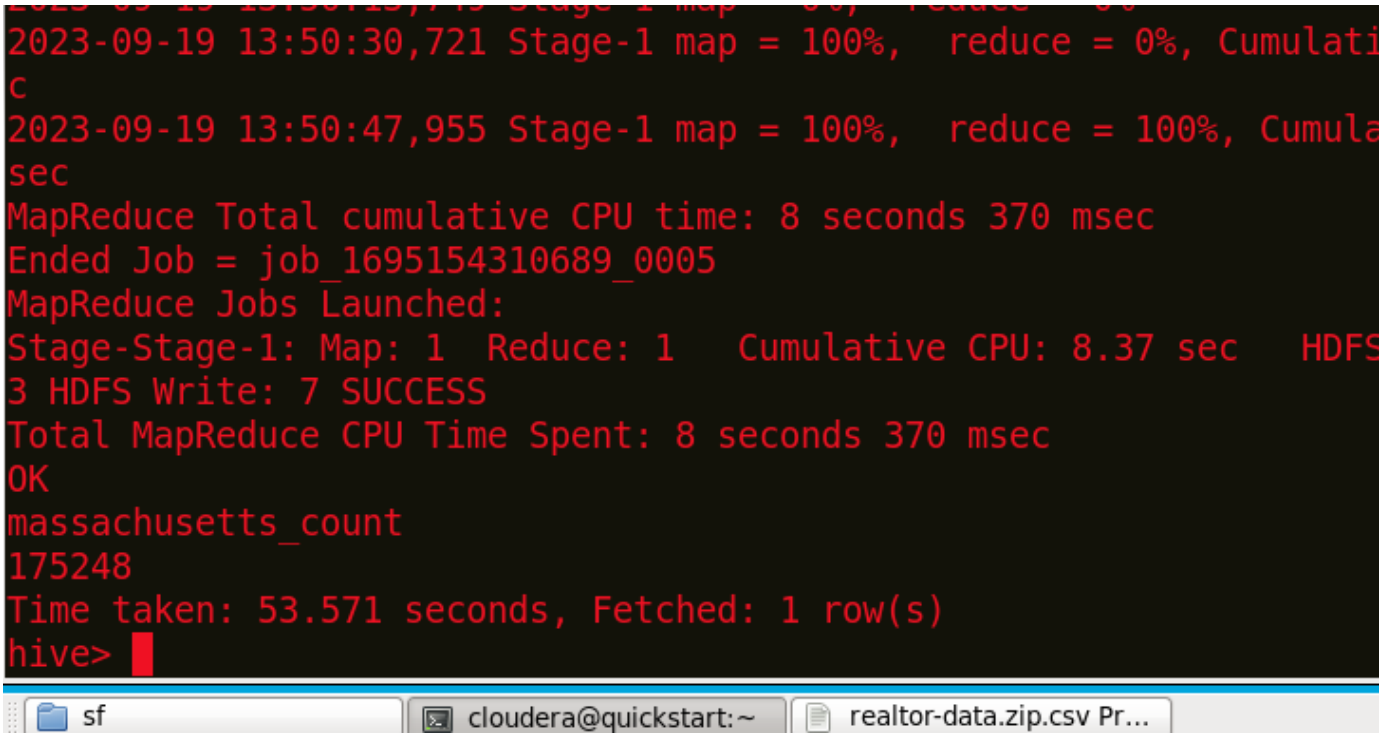
Get the Total number of beds

```
SELECT COUNT(bed) AS bed_count FROM housing_price;
```



Get number of properties where state = "Massachusetts"

```
SELECT COUNT(*) AS massachusetts_count FROM housing_price WHERE state =
'Massachusetts';
```



Create a new table based on the previous table where city "San Juan"

```
CREATE TABLE IF NOT EXISTS san_juan_housing_price AS SELECT * FROM housing_price
WHERE city = 'San Juan';
```

Write a query such that if there is an entry called Warwick print "My City" else "Not My City"

```sql
SELECT
    CASE
        WHEN COUNT(*) > 0 THEN 'My City'
        ELSE 'Not My City'
    END AS result
FROM housing_price
WHERE city = 'Warwick';
```