DS Assignment Group -B1

Name: Gayatri Mhetre

Roll no 22018031

```
[cloudera@quickstart ~]$ impala-shell

Starting Impala Shell without Kerberos authentication

Connected to quickstart.cloudera:21000

Server version: impalad version 2.10.0-cdh5.13.0 RELEASE (build
2511805f1eaa991df1460276c7e9f19d819cd4e4)

*********************************************************************************

Welcome to the Impala shell.

(Impala Shell v2.10.0-cdh5.13.0 (2511805) built on Wed Oct  4 10:55:37 PDT 2017)


When pretty-printing is disabled, you can use the '--output_delimiter' flag to set

the delimiter for fields in the same row. The default is ','.

*********************************************************************************

[quickstart.cloudera:21000] > SHOW DATABASES;

Query: show DATABASES

+-----------------+---------------------------------------------------------+
| name            | comment                                                 |
+-----------------+---------------------------------------------------------+
| _impala_builtins | System database for Impala builtin functions |
| default          | Default Hive database                        |
| info             |                                              |
+-----------------+---------------------------------------------------------+

Fetched 3 row(s) in 0.10s

[quickstart.cloudera:21000] > CREATE DATABASE mydb;

Query: create DATABASE mydb

Fetched 0 row(s) in 0.17s

[quickstart.cloudera:21000] > USE mydb;

Query: use mydb

[quickstart.cloudera:21000] > CREATE TABLE students(roll INT, name STRING, gender STRING, dob
DATE, gpa FLOAT);

Query: create TABLE students(roll INT, name STRING, gender STRING, dob DATE, gpa FLOAT)

ERROR: AnalysisException: Unsupported data type: DATE
```

```
[quickstart.cloudera:21000] > ALTER TABLE students ADD COLUMNS (branch STRING);

Query: alter TABLE students ADD COLUMNS (branch STRING)



Fetched 0 row(s) in 4.31s

[quickstart.cloudera:21000] > DESC students;

Query: describe students


+------------+----------------+--------------+
| name       | type           | comment      |
+------------+----------------+--------------+
| roll       | int            |              |
| name       | string         |              |
| gender     | string         |              |
| dob        | timestamp      |              |
| gpa        | float          |              |
| branch     | string         |              |
+------------+----------------+--------------+


Fetched 6 row(s) in 0.12s

ry: insert INTO students VALUES(101,'Priya','Female','1999-10-12',8.32,'IT')

Query submitted at: 2024-04-20 20:47:43 (Coordinator: http://quickstart.cloudera:25000)

Query progress can be monitored at:
http://quickstart.cloudera:25000/query_plan?query_id=3f4742e2d35a6dc7:7c37d9e200000000

Modified 1 row(s) in 0.11s

[quickstart.cloudera:21000] > INSERT INTO students VALUES(102,'Abhijit Sharma','Male','1999-
11-10',8.66,'Electrical'), (103, 'Amit Tripathi', 'Male', '2001-06-24',8.11,'IT');

Query: insert INTO students VALUES(102,'Abhijit Sharma','Male','1999-11-10',8.66,'Electrical'),
(103, 'Amit Tripathi', 'Male', '2001-06-24',8.11,'IT')

Query submitted at: 2024-04-20 20:49:37 (Coordinator: http://quickstart.cloudera:25000)

Query progress can be monitored at:
http://quickstart.cloudera:25000/query_plan?query_id=3d45feda8a31084d:1254816500000000

Modified 2 row(s) in 0.12s

[quickstart.cloudera:21000] > SELECT * FROM students;

Query: select * FROM students

Query submitted at: 2024-04-20 20:49:50 (Coordinator: http://quickstart.cloudera:25000)

Query progress can be monitored at:
http://quickstart.cloudera:25000/query_plan?query_id=ef4831ad95afeefe:5989aae000000000
```

```
+----------+------------------+----------+---------------------+--------------------+------------------+
| roll | name             | gender | dob                 | gpa                | branch           |
+--------+                +        +                     +-------------------------------+
| 102  | Abhijit Sharma | Male   | 1999-11-10 00:00:00 | 8.659999847412109 | Electrical       |
| 103  | Amit Tripathi  | Male   | 2001-06-24 00:00:00 | 8.109999656677246 | IT               |
| 101  | Ravi Kumar     | Male   | 1998-05-15 00:00:00 | 7.800000190734863 | Computer Science |
| 101  | Priya          | Female | 1999-10-12 00:00:00 | 8.319999694824219 | IT               |
+----------+------------------+----------+---------------------+--------------------+------------------+
```

Fetched 4 row(s) in 0.38s

[quickstart.cloudera:21000] > SELECT gender, AVG(gpa) FROM students GROUP BY gender;;

Query: select gender, AVG(gpa) FROM students GROUP BY gender

Query submitted at: 2024-04-20 21:01:06 (Coordinator: http://quickstart.cloudera:25000)

Query progress can be monitored at: http://quickstart.cloudera:25000/query_plan?query_id=32482b1564fd3a89:b8ada0a000000000

```
+--------+------------------+
| gender | avg(gpa)         |
+--------+------------------+
| Male   | 7.117499947547913 |
| Female | 5.206666549046834 |
+--------+------------------+
```

Fetched 2 row(s) in 0.26s

[quickstart.cloudera:21000] > SELECT branch, AVG(gpa) AS avg_gpa FROM students GROUP BY branch ORDER BY avg_gpa;

Query: select branch, AVG(gpa) AS avg_gpa FROM students GROUP BY branch ORDER BY avg_gpa

Query submitted at: 2024-04-20 21:03:22 (Coordinator: http://quickstart.cloudera:25000)

Query progress can be monitored at: http://quickstart.cloudera:25000/query_plan?query_id=714e46f6e6167d46:a02e0c700000000

```
+-------------------------+------------------+
| branch                  | avg_gpa          |
+-------------------------+------------------+
```

```
| Computer Science | 5.850000143051147 |

| Electrical       | 6.179999947547913 |

| IT               | 6.676666418711345 |

+----------------------------+------------------------------+

Fetched 3 row(s) in 0.17s
```

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Tables   (1) ⊤ + 🔄   1 SELECT * FROM students;   Search...
▦ students   ⓘ mydb.students
                                ▶
                                ▣▾
                                        Query History 🔍 📅   Saved Queries 🔍 🔄   Results (7) 🔍 ↗

                                ▦   roll   name   gender   dob   gpa   branch
                                📊▾ 1   101   Ravi Kumar   Male   1998-05-15 00:00:00 7.8000001907348633   Computer Science
                                🗔   2   101   Priya   Female   1999-10-12 00:00:00 8.3199996948242188   IT
                                ⬇   3   104   Neha Sharma   Female   1998-09-25 00:00:00 3.5999999046325684   IT
                                     4   105   Sandeep Gupta Male   1997-07-12 00:00:00 3.9000000953674316   Computer Science
                                     5   106   Pooja Verma   Female   1999-03-18 00:00:00 3.7000000476837158   Electrical
                                     6   102   Abhijit Sharma Male   1999-11-10 00:00:00 8.6599998474121094   Electrical
                                     7   103   Amit Tripathi Male   2001-06-24 00:00:00 8.1099996566772461   IT

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‹ mydb   0s mydb▾ text▾ 🗎 ⚙ ?   Tables
Tables   (1) ⊤ + 🔄   1 SELECT * FROM students WHERE branch='IT';   Search...
▦ students   ⓘ mydb.students
                                ▶
                                ▣▾
                                        Query History 🔍 📅   Saved Queries 🔍 🔄   Results (3) 🔍 ↗

                                ▦   roll   name   gender   dob   gpa   branch
                                📊▾ 1   104   Neha Sharma   Female   1998-09-25 00:00:00 3.5999999046325684   IT
                                🗔   2   103   Amit Tripathi Male   2001-06-24 00:00:00 8.1099996566772461   IT
                                ⬇   3   101   Priya   Female   1999-10-12 00:00:00 8.3199996948242188   IT

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