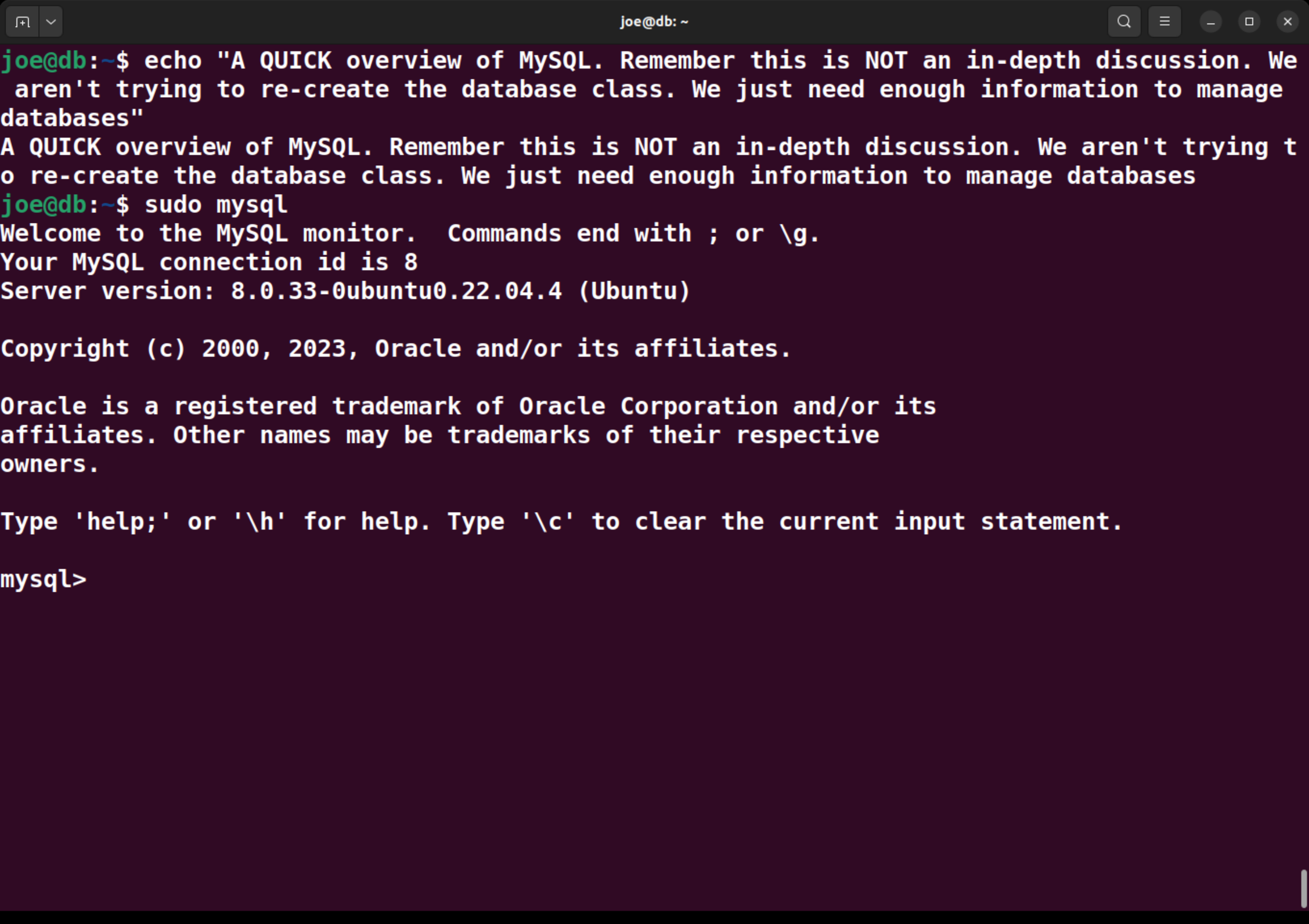

joe@db: ~
joe@db:~$ echo "A QUICK overview of MySQL. Remember this is NOT an in-depth discussion. We aren't trying to re-create the database class. We just need enough information to manage databases"
A QUICK overview of MySQL. Remember this is NOT an in-depth discussion. We aren't trying to re-create the database class. We just need enough information to manage databases
joe@db:~$ sudo mysql
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33-0ubuntu0.22.04.4 (Ubuntu)
Copyright (c) 2000, 2023, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql>

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.08 sec)

mysql> Those are pre-existing databases. We will explore one of them later.
```

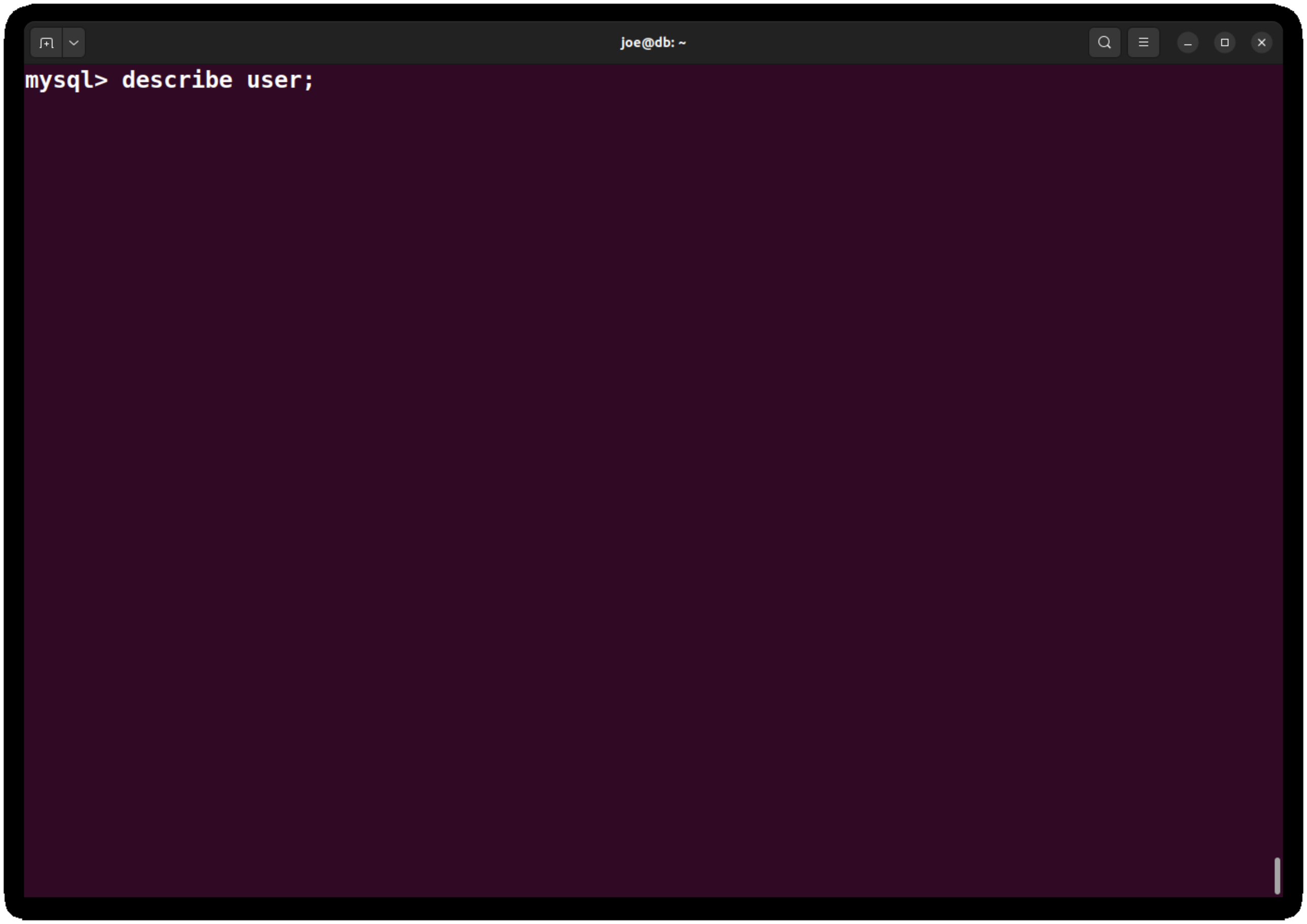
```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.08 sec)

mysql> use mysql;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql>
```

joe@db: ~

```
mysql> show tables;
```

```
| help_relation                                          |
| help_topic                                             |
| innodb_index_stats                                     |
| innodb_table_stats                                     |
| password_history                                       |
| plugin                                                 |
| procs_priv                                             |
| proxies_priv                                           |
| replication_asynchronous_connection_failover           |
| replication_asynchronous_connection_failover_managed   |
| replication_group_configuration_version                |
| replication_group_member_actions                       |
| role_edges                                             |
| server_cost                                            |
| servers                                                |
| slave_master_info                                      |
| slave_relay_log_info                                   |
| slave_worker_info                                      |
| slow_log                                               |
| tables_priv                                            |
| time_zone                                              |
| time_zone_leap_second                                  |
| time_zone_name                                         |
| time_zone_transition                                   |
| time_zone_transition_type                              |
| user                                                   |
+--------------------------------------------------------+
37 rows in set (0.00 sec)

mysql> note that all commands must end with a semicolon
```

```
| help_relation                                          |
| help_topic                                             |
| innodb_index_stats                                     |
| innodb_table_stats                                     |
| password_history                                       |
| plugin                                                 |
| procs_priv                                             |
| proxies_priv                                           |
| replication_asynchronous_connection_failover           |
| replication_asynchronous_connection_failover_managed   |
| replication_group_configuration_version                |
| replication_group_member_actions                       |
| role_edges                                             |
| server_cost                                            |
| servers                                                |
| slave_master_info                                      |
| slave_relay_log_info                                   |
| slave_worker_info                                      |
| slow_log                                               |
| tables_priv                                            |
| time_zone                                              |
| time_zone_leap_second                                  |
| time_zone_name                                         |
| time_zone_transition                                   |
| time_zone_transition_type                              |
| user                                                   |
+--------------------------------------------------------+
37 rows in set (0.00 sec)

mysql> let's look at the user table
```


joe@db: ~
mysql> describe user;

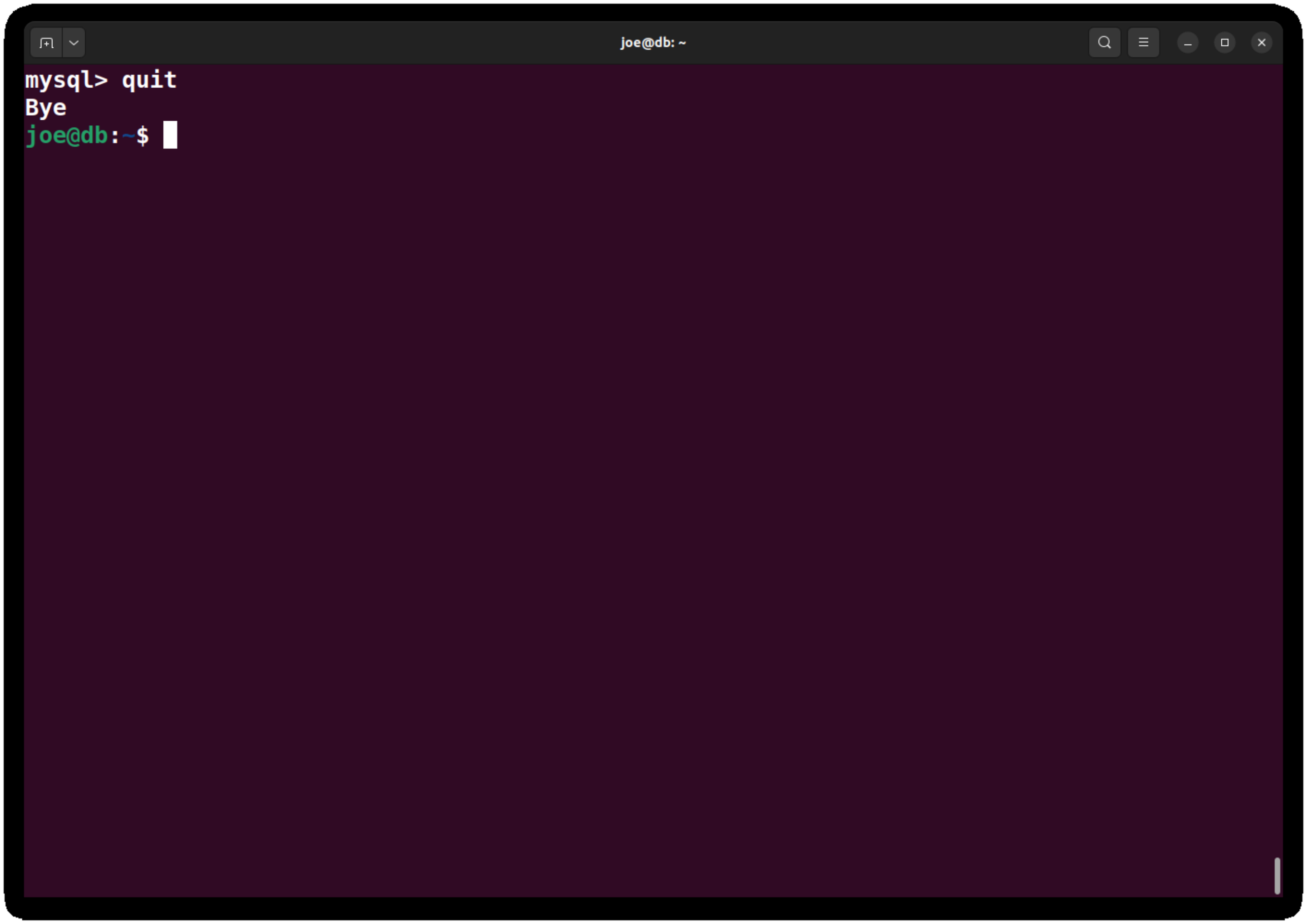
```
|           |       |
| plugin                    | char(64)                          | NO   |     | caching_sha2
_password |           |       |
| authentication_string     | text                              | YES  |     | NULL
|           |       |
| password_expired          | enum('N','Y')                     | NO   |     | N
|           |       |
| password_last_changed     | timestamp                         | YES  |     | NULL
|           |       |
| password_lifetime         | smallint unsigned                 | YES  |     | NULL
|           |       |
| account_locked            | enum('N','Y')                     | NO   |     | N
|           |       |
| Create_role_priv          | enum('N','Y')                     | NO   |     | N
|           |       |
| Drop_role_priv            | enum('N','Y')                     | NO   |     | N
|           |       |
| Password_reuse_history    | smallint unsigned                 | YES  |     | NULL
|           |       |
| Password_reuse_time       | smallint unsigned                 | YES  |     | NULL
|           |       |
| Password_require_current | enum('N','Y')                     | YES  |     | NULL
|           |       |
| User_attributes           | json                              | YES  |     | NULL
|           |       |
+---------------------------+-----------------------------------+------+-----+-------------
----------+-------+
51 rows in set (0.00 sec)

mysql>
```

```
mysql> those are all the fields that mysql will track about a user.
```

```
mysql> select Host,User from user;
+-----------+------------------+
| Host      | User             |
+-----------+------------------+
| localhost | debian-sys-maint |
| localhost | mysql.infoschema |
| localhost | mysql.session    |
| localhost | mysql.sys        |
| localhost | root             |
+-----------+------------------+
5 rows in set (0.00 sec)

mysql> The select statement will allow me to show only certain fields from a table
```

```
mysql> describe db;
+-----------------------+---------------+------+-----+---------+-------+
| Field                 | Type          | Null | Key | Default | Extra |
+-----------------------+---------------+------+-----+---------+-------+
| Host                  | char(255)     | NO   | PRI |         |       |
| Db                    | char(64)      | NO   | PRI |         |       |
| User                  | char(32)      | NO   | PRI |         |       |
| Select_priv           | enum('N','Y') | NO   |     | N       |       |
| Insert_priv           | enum('N','Y') | NO   |     | N       |       |
| Update_priv           | enum('N','Y') | NO   |     | N       |       |
| Delete_priv           | enum('N','Y') | NO   |     | N       |       |
| Create_priv           | enum('N','Y') | NO   |     | N       |       |
| Drop_priv             | enum('N','Y') | NO   |     | N       |       |
| Grant_priv            | enum('N','Y') | NO   |     | N       |       |
| References_priv       | enum('N','Y') | NO   |     | N       |       |
| Index_priv            | enum('N','Y') | NO   |     | N       |       |
| Alter_priv            | enum('N','Y') | NO   |     | N       |       |
| Create_tmp_table_priv | enum('N','Y') | NO   |     | N       |       |
| Lock_tables_priv      | enum('N','Y') | NO   |     | N       |       |
| Create_view_priv      | enum('N','Y') | NO   |     | N       |       |
| Show_view_priv        | enum('N','Y') | NO   |     | N       |       |
| Create_routine_priv   | enum('N','Y') | NO   |     | N       |       |
| Alter_routine_priv    | enum('N','Y') | NO   |     | N       |       |
| Execute_priv          | enum('N','Y') | NO   |     | N       |       |
| Event_priv            | enum('N','Y') | NO   |     | N       |       |
| Trigger_priv          | enum('N','Y') | NO   |     | N       |       |
+-----------------------+---------------+------+-----+---------+-------+
22 rows in set (0.01 sec)

mysql> Another table
```

```
mysql> select User,Host,Db from db;
+---------------+-----------+--------------------+
| User          | Host      | Db                 |
+---------------+-----------+--------------------+
| mysql.session | localhost | performance_schema |
| mysql.sys     | localhost | sys                |
+---------------+-----------+--------------------+
2 rows in set (0.00 sec)

mysql> only show those fields from the db table
```


joe@db: ~
mysql> quit
Bye
joe@db:~$