

# CS-313 - Assignment 4

Monu Kumar Soyal - 200010029

September 13, 2022

---

## Answer 1

SQL commands to create a user called universityDB0029

*create user universityDB0029@localhost identified by 'Password\*123';  
grant all privileges on universityDB0029.\* to universityDB0029@localhost;*

```
mysql> create user universityDB0029@localhost identified by 'Password*123';  
Query OK, 0 rows affected (0.42 sec)  
  
mysql> grant all privileges on universityDB0029.* to universityDB0029@localhost;  
Query OK, 0 rows affected (0.02 sec)
```

Terminal command to login with universityDB0029 user

*mysql -u universityDB0029 -p*

```
monusoyal@DESKTOP-C7BLGHJ:~$ mysql -u universityDB0029 -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 20  
Server version: 8.0.30-0ubuntu0.22.04.1 (Ubuntu)  
  
Copyright (c) 2000, 2022, 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.
```

## Answer 2

SQL command to create the university database

*create database university;*

```
mysql> create database university;  
Query OK, 1 row affected (0.04 sec)
```

## Answer 3

SQL command to connect the database

*use university;*

```
mysql> use university;  
Database changed
```

## Answer 4

SQL command to run the DDL.sql file for creating the tables in university database

*source DDL.sql*

```
mysql> source DDL.sql  
Query OK, 0 rows affected (0.46 sec)  
  
Query OK, 0 rows affected (0.16 sec)  
  
Query OK, 0 rows affected (0.18 sec)  
  
Query OK, 0 rows affected (0.09 sec)  
  
Query OK, 0 rows affected (0.19 sec)  
  
Query OK, 0 rows affected (0.16 sec)  
  
Query OK, 0 rows affected (0.14 sec)  
  
Query OK, 0 rows affected (0.16 sec)  
  
Query OK, 0 rows affected (0.17 sec)  
  
Query OK, 0 rows affected (0.09 sec)  
  
Query OK, 0 rows affected (0.16 sec)
```

## Answer 5

SQL command to run the InsertValues.sql file for loading the data into tables

*source InsertValues.sql*

```
mysql> source InsertValues.sql
Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.02 sec)

Query OK, 0 rows affected (0.01 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

## Answer 6

SQL commands to get the details of the tables of university database

1. advisor table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "advisor";*

```
mysql> select table_name, column_name, data_type from information_schema.column
s where table_name = "advisor";
+-----+-----+-----+
| TABLE_NAME | COLUMN_NAME | DATA_TYPE |
+-----+-----+-----+
| advisor     | s_ID        | varchar    |
| advisor     | i_ID        | varchar    |
+-----+-----+-----+
2 rows in set (0.01 sec)
```

## 2. classroom table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "classroom";*

```
mysql> select table_name, column_name, data_type from information_schema.columns  
where table_name = "classroom";  
+-----+-----+-----+  
| TABLE_NAME | COLUMN_NAME | DATA_TYPE |  
+-----+-----+-----+  
| classroom   | building    | varchar    |  
| classroom   | room_number | varchar    |  
| classroom   | capacity    | decimal    |  
+-----+-----+-----+  
3 rows in set (0.00 sec)
```

## 3. course table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "course";*

```
mysql> select table_name, column_name, data_type from information_schema.columns  
where table_name = "course";  
+-----+-----+-----+  
| TABLE_NAME | COLUMN_NAME | DATA_TYPE |  
+-----+-----+-----+  
| course      | course_id   | varchar    |  
| course      | title       | varchar    |  
| course      | dept_name   | varchar    |  
| course      | credits     | decimal    |  
+-----+-----+-----+  
4 rows in set (0.01 sec)
```

## 4. department table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "department";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "department";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
department	dept_name	varchar
department	building	varchar
department	budget	decimal

```
3 rows in set (0.01 sec)
```

## 5. instructor table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "instructor";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "instructor";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
instructor	ID	varchar
instructor	name	varchar
instructor	dept_name	varchar
instructor	salary	decimal

```
4 rows in set (0.01 sec)
```

## 6. prereq table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "prereq";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "prereq";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
prereq	course_id	varchar
prereq	prereq_id	varchar

```
2 rows in set (0.01 sec)
```

## 7. section table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "section";*

```
mysql> select table_name, column_name, data_type from information_schema.columns  
where table_name = "section";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
section	course_id	varchar
section	sec_id	varchar
section	semester	varchar
section	year	decimal
section	building	varchar
section	room_number	varchar
section	time_slot_id	varchar

```
7 rows in set (0.01 sec)
```

## 8. student table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "student";*

```
mysql> select table_name, column_name, data_type from information_schema.columns  
where table_name = "student";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
student	ID	varchar
student	name	varchar
student	dept_name	varchar
student	tot_cred	decimal

```
4 rows in set (0.01 sec)
```

## 9. takes table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "takes";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "takes";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
takes	ID	varchar
takes	course_id	varchar
takes	sec_id	varchar
takes	semester	varchar
takes	year	decimal
takes	grade	varchar

```
6 rows in set (0.00 sec)
```

## 10. teaches table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "teaches";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "teaches";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
teaches	ID	varchar
teaches	course_id	varchar
teaches	sec_id	varchar
teaches	semester	varchar
teaches	year	decimal

```
5 rows in set (0.00 sec)
```

## 11. time\_slot table

*select table\_name, column\_name, data\_type  
from information\_schema.columns  
where table\_name = "time\_slot";*

```
mysql> select table_name, column_name, data_type from information_schema.columns
where table_name = "time_slot";
```

TABLE_NAME	COLUMN_NAME	DATA_TYPE
time_slot	time_slot_id	varchar
time_slot	day	varchar
time_slot	start_hr	decimal
time_slot	start_min	decimal
time_slot	end_hr	decimal
time_slot	end_min	decimal

```
6 rows in set (0.01 sec)
```