

# **IT252 Assignment 1**

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TOPIC: TABLE SQL

Database name: nitk

No. of relations/tables: 5

Abbreviations used:

- sname: student name
- sid: student id
- fname: faculty name
- fid: faculty id
- dept: department
- cname: course name
- cid: course id

Description of each table(detailed given in output screenshots):

1)student\_info

sname	sid	dept

2)fac\_info

fname	fid	dept

3) student\_courses

sname	sid	cname	cid

4) fac\_courses

fname	fid	cid

5)course\_list

cname	cid

All commands screenshots(DDL and DML):

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Activities Terminal Jan 10 22:58

suyash@suyash-VirtualBox: ~

```
suyash@suyash-VirtualBox:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.22-0ubuntu0.20.04.3 (Ubuntu)

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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> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.00 sec)

mysql> create database ntk;
Query OK, 1 row affected (0.01 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| ntk |
| performance_schema |
| sys |
+-----+
5 rows in set (0.00 sec)

mysql> use ntk;
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> create table student_info(sname varchar(25),sid char(9) not null,dept varchar(20));
Query OK, 0 rows affected (0.12 sec)

mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| student_info |
+-----+
1 row in set (0.00 sec)

mysql> desc student_info;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sname | varchar(25) | YES | | NULL | |
| sid | char(9) | NO | | NULL | |
| dept | varchar(20) | YES | | NULL | |
+-----+
3 rows in set (0.02 sec)

mysql> create table fac_info(fname varchar(25),fid char(10),dept varchar(20));
Query OK, 0 rows affected (0.02 sec)

mysql> alter table fac_info add column age int;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table fac_info modify column fid int;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table fac_info drop column age int;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'int' at line 1
mysql> alter table fac_info drop column age;
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> create table sample_table(name char(10),id int);
Query OK, 0 rows affected (0.04 sec)

mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| fac_info |
| sample_table |
| student_info |
+-----+
3 rows in set (0.00 sec)

mysql> desc sample_table;
```

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suyash@suyash-VirtualBox: ~

```
mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| student_info |
+-----+
1 row in set (0.00 sec)

mysql> desc student_info;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| sname | varchar(25) | YES | | NULL | |
| sid | char(9) | NO | | NULL | |
| dept | varchar(20) | YES | | NULL | |
+-----+
3 rows in set (0.02 sec)

mysql> create table fac_info(fname varchar(25),fid char(10),dept varchar(20));
Query OK, 0 rows affected (0.02 sec)

mysql> alter table fac_info add column age int;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table fac_info modify column fid int;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table fac_info drop column age int;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'int' at line 1
mysql> alter table fac_info drop column age;
Query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> create table sample_table(name char(10),id int);
Query OK, 0 rows affected (0.04 sec)

mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| fac_info |
| sample_table |
| student_info |
+-----+
3 rows in set (0.00 sec)

mysql> desc sample_table;
```

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suyash@suyash-VirtualBox: ~

```
mysql> drop table sample_table;
Query OK, 0 rows affected (0.02 sec)

mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| fac_info      |
| student_info  |
+-----+
2 rows in set (0.00 sec)

mysql> create table student_courses(sname varchar(25),sid char(9),cname varchar(25),cid char(6));
Query OK, 0 rows affected (0.04 sec)

mysql> create table fac_courses(fname varchar(25),fid int,cid char(6));
Query OK, 0 rows affected (0.03 sec)

mysql> create table course_list(cname varchar(25),cid char(6));
Query OK, 0 rows affected (0.03 sec)

mysql> show tables;
+-----+
| Tables_in_ntk |
+-----+
| course_list    |
| fac_courses    |
| fac_info       |
| student_courses|
| student_info   |
+-----+
5 rows in set (0.01 sec)

mysql> insert into course_list values ('dbms','lt001'),('os','lt002'),
-> ('dsa','lt003'),('hrm','sm001'),('dm','cs001'),('evs','sm002'),('eg','me001');
Query OK, 7 rows affected (0.02 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql> select * from course_list;
+-----+-----+
| cname | cid |
+-----+-----+
| dbms  | lt001 |
| os    | lt002 |
| dsa   | lt003 |
| hrm   | sm001 |
| dm    | cs001 |
| evs   | sm002 |
| eg    | me001 |
+-----+-----+
```

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suyash@suyash-VirtualBox: ~

```
mysql> select * from course_list;
+-----+-----+
| cname | cid |
+-----+-----+
| dbms  | lt001 |
| os    | lt002 |
| dsa   | lt003 |
| hrm   | sm001 |
| dm    | cs001 |
| evs   | sm002 |
| eg    | me001 |
+-----+-----+
7 rows in set (0.01 sec)

mysql> insert into student_info values ('stud1','191lt001','it'),
-> ('stud2','191lt002','it'),('stud3','191cs001','cs'),
-> ('stud4','191me001','me'),('stud5','191sm001','sm'),
-> ('stud6','191lt003','it'),('stud7','191lt004','it');
Query OK, 7 rows affected (0.00 sec)
Records: 7 Duplicates: 0 Warnings: 0

mysql> insert into fac_info values ('fac1',101,'it'),('fac2',102,'it'),
-> ('fac3',103,'cs'),('fac4',104,'me'),('fac5',105,'sm');
Query OK, 5 rows affected (0.01 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql> insert into student_courses values ('stud6','191lt003','os','lt002'),
-> ('stud3','191cs001','dm','cs001'),('stud4','191me001','eg','me001'),
-> ('stud5','191sm001','hrm','sm001');
Query OK, 4 rows affected (0.02 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> insert into fac_courses values ('fac2',102,'lt002'),('fac3',103,'cs001'),
-> ('fac4',104,'me001'),('fac5',105,'sm001');
Query OK, 4 rows affected (0.01 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> select * from student_courses where cid='lt002';
+-----+-----+-----+-----+
| sname | sid   | cname | cid |
+-----+-----+-----+-----+
| stud6 | 191lt003 | os    | lt002 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> update student_courses set cname='dsa',cid='lt003' where cid='lt002';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

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suyash@suyash-VirtualBox: ~

```
mysql> select * from student_courses where cid='it003';
+-----+-----+-----+
| sname | sid | cname | cid |
+-----+-----+-----+
| stud6 | 191it003 | dsa | it003 |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql> delete from student_courses where sid='191it003';
Query OK, 1 row affected (0.00 sec)

mysql> select * from student_courses;
+-----+-----+-----+
| sname | sid | cname | cid |
+-----+-----+-----+
| stud3 | 191cs001 | dm | cs001 |
| stud4 | 191me001 | eg | me001 |
| stud5 | 191sm001 | hrn | sm001 |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> create table sample_table(field1 int default 99,field2 varchar(10) not null,field3 char(20));
Query OK, 0 rows affected (0.02 sec)

mysql> desc sample_table;
+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+
| field1 | int | YES | | 99 | |
| field2 | varchar(10) | NO | | NULL | |
| field3 | char(20) | YES | | NULL | |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> insert into sample_table values (,'abc','abc'),(12,'xyz','wxy');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ', 'abc','abc'),(12,'xyz','wxy')' at line 1
mysql> insert into sample_table values (default,null,'abc'),(12,'xyz','wxy');
ERROR 1048 (23000): Column 'field2' cannot be null
mysql> insert into sample_table values (default,'abc',null),(12,'xyz','wxy');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select * from sample_table;
+-----+-----+-----+
| field1 | field2 | field3 |
+-----+-----+-----+
| 99 | abc | NULL |
| 12 | xyz | wxy |
+-----+-----+-----+
```

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suyash@suyash-VirtualBox: ~

```
Query OK, 0 rows affected (0.02 sec)

mysql> desc sample_table;
+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+
| field1 | int | YES | | 99 | |
| field2 | varchar(10) | NO | | NULL | |
| field3 | char(20) | YES | | NULL | |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> insert into sample_table values (,'abc','abc'),(12,'xyz','wxy');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ', 'abc','abc'),(12,'xyz','wxy')' at line 1
mysql> insert into sample_table values (default,null,'abc'),(12,'xyz','wxy');
ERROR 1048 (23000): column 'field2' cannot be null
mysql> insert into sample_table values (default,'abc',null),(12,'xyz','wxy');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select * from sample_table;
+-----+-----+-----+
| field1 | field2 | field3 |
+-----+-----+-----+
| 99 | abc | NULL |
| 12 | xyz | wxy |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> truncate table sample_table;
Query OK, 0 rows affected (0.02 sec)

mysql> desc sample_table;
+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+
| field1 | int | YES | | 99 | |
| field2 | varchar(10) | NO | | NULL | |
| field3 | char(20) | YES | | NULL | |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> drop table sample_table;
Query OK, 0 rows affected (0.01 sec)

mysql> desc sample_table;
ERROR 1146 (42S02): Table 'nitk.sample_table' doesn't exist
mysql>
```