



NOTRE DAME UNIVERSITY
BANGLADESH

Assignment No. 02

Submitted by:

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Batch: CSE-20

Course Title: Database Management Systems

Course Code: CSE-2206

Assignment No: Practice MySQL-2

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Assignment Topic: (a) Create Database

(b) Create Tables

(c) Display information

Submitted to:

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Associate Professor, NDUB

1. Create two tables in your database:

Students

Student ID	StudFirst Name	StudLast Name	StudStreet Address	StudCity	StudState	StudZipcode	<< other fields >>
60001	Zachary	Erlich	1204 Bryant Road	Seattle	WA	98125	.....
60002	Susan	McLain	101 C Street, Apt. 32	Redmond	WA	98052	.....
60003	Joe	Rosales	201 Cherry Lane SE	Redmond	WA	98073	.....
60004	Diana	Barlet	4141 Lake City Way	Woodinville	WA	98072	.....
60005	Tom	Wickerath	2100 Mineola Avenue	Bellevue	WA	98006	.....

Classes

Class ID	Class Name	Class Category	Credits	Instructor ID	Classroom	<< other fields >>
900001	Advanced Calculus	Math	5	220087	2201	.....
900002	Advanced Music Theory	Music	3	220039	7012	.....
900003	American History	History	5	220148	3305	.....
900004	Computers in Business	Computer Science	2	220387	5115	.....
900005	Computers in Society	Computer Science	2	220387	5117	.....
900006	Introduction to Biology	Biology	5	220498	3112	.....
900007	Introduction to Database Design	Computer Science	5	220516	5105	.....
900008	Introduction to Physics	Physics	4	220087	2205	.....
900009	Introduction to Political Science	Political Science	5	220337	3308	.....

```

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| students |
+-----+
5 rows in set (0.000 sec)

MariaDB [(none)]> use students;
Database changed
MariaDB [students]> CREATE TABLE Students(
  -> Student_ID int NOT NULL PRIMARY KEY,
  -> StudFirst_Name varchar(255),
  -> StudLast_Name varchar(255),
  -> StudStreet_Address varchar(255),
  -> StudCity varchar(255),
  -> StudState varchar(255),
  -> StudZipCode int NOT NULL
  -> );
Query OK, 0 rows affected (0.220 sec)

MariaDB [students]> INSERT INTO students(Student_ID, StuFirst_Name, StuLast_Name, StuStreet_Address, StudCity, StudState, StudZipCode)
  -> VALUES('60001','Zachary','Erlich','1204 Bryant Road', 'Seattle', 'WA', '98125');
ERROR 1054 (42522): Unknown column 'StuFirst_Name' in 'field list'
MariaDB [students]> INSERT INTO students(Student_ID, StudFirst_Name, StudLast_Name, StudStreet_Address, StudCity, StudState, StudZipCode)
  -> VALUES('60001','Zachary','Erlich','1204 Bryant Road', 'Seattle', 'WA', '98125');
Query OK, 1 row affected (0.029 sec)

MariaDB [students]> INSERT INTO students VALUES ('60002','Susan','McLain','101 C Street, Apt. 32','Redmond','WA','98052');
Query OK, 1 row affected (0.033 sec)

MariaDB [students]> INSERT INTO students VALUES ('60003','joe','Rosales','201 Cherry Lane SE','Redmond','WA','98078');

MariaDB [students]> INSERT INTO students(Student_ID, StuFirst_Name, StuLast_Name, StuStreet_Address, StudCity, StudState, StudZipCode)
  -> VALUES('60001','Zachary','Erlich','1204 Bryant Road', 'Seattle', 'WA', '98125');
ERROR 1054 (42522): Unknown column 'StuFirst_Name' in 'field list'
MariaDB [students]> INSERT INTO students(Student_ID, StudFirst_Name, StudLast_Name, StudStreet_Address, StudCity, StudState, StudZipCode)
  -> VALUES('60001','Zachary','Erlich','1204 Bryant Road', 'Seattle', 'WA', '98125');
Query OK, 1 row affected (0.029 sec)

MariaDB [students]> INSERT INTO students VALUES ('60002','Susan','McLain','101 C Street, Apt. 32','Redmond','WA','98052');
Query OK, 1 row affected (0.033 sec)

MariaDB [students]> INSERT INTO students VALUES ('60003','joe','Rosales','201 Cherry Lane SE','Redmond','WA','98078');
Query OK, 1 row affected (0.032 sec)

MariaDB [students]> INSERT INTO students VALUES ('60004','Diana','Barlet','4141 Lake City Way','Woodinville','WA','98072');
Query OK, 1 row affected (0.031 sec)

MariaDB [students]> INSERT INTO students VALUES ('60005','Tom','Wickerath','2100 Mineola Avenue','Bellevue','WA','98006');
Query OK, 1 row affected (0.043 sec)

MariaDB [students]> select * from students;
+-----+-----+-----+-----+-----+-----+-----+
| Student_ID | StudFirst_Name | StudLast_Name | StudStreet_Address | StudCity | StudState | StudZipCode |
+-----+-----+-----+-----+-----+-----+-----+
| 60001 | Zachary | Erlich | 1204 Bryant Road | Seattle | WA | 98125 |
| 60002 | Susan | McLain | 101 C Street, Apt. 32 | Redmond | WA | 98052 |
| 60003 | joe | Rosales | 201 Cherry Lane SE | Redmond | WA | 98078 |
| 60004 | Diana | Barlet | 4141 Lake City Way | Woodinville | WA | 98072 |
| 60005 | Tom | Wickerath | 2100 Mineola Avenue | Bellevue | WA | 98006 |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.000 sec)

```

```

MariaDB [(none)]> use students;
Database changed
MariaDB [students]> CREATE TABLE Classes(
  -> Class_ID int NOT NULL PRIMARY KEY,
  -> Class_Name varchar(255),
  -> Class_Category varchar(255),
  -> Credits int NOT NULL,
  -> Instructor_ID int NOT NULL,
  -> Classroom int NOT NULL
  -> );
Query OK, 0 rows affected (0.160 sec)

MariaDB [students]> INSERT INTO classes(Class_ID, Class_Name, Class_Category, Credits, Instructor_ID, Classroom)
  -> VALUES('900001', 'Advanced_Calculus', 'Math', '5', '220087', '2201'
  -> );
Query OK, 1 row affected, 1 warning (0.041 sec)

MariaDB [students]> INSERT INTO classes VALUES('900002', 'Advanced Music Theory', 'Music', '3', '220039', '7012');
Query OK, 1 row affected (0.032 sec)

MariaDB [students]> INSERT INTO classes VALUES('900003', 'American History', 'History', '5', '220148', '3305');
Query OK, 1 row affected (0.029 sec)

MariaDB [students]> INSERT INTO classes VALUES('900004', 'Computer in Business', 'Computer Science', '2', '220387', '5115');
Query OK, 1 row affected (0.031 sec)

MariaDB [students]> INSERT INTO classes VALUES('900005', 'Computer in Society', 'Computer Science', '2', '220387', '5117');
Query OK, 1 row affected (0.038 sec)

MariaDB [students]> INSERT INTO classes VALUES('900006', 'Introduction to Biology', 'Biology', '5', '220498', '3112');
Query OK, 1 row affected (0.043 sec)

MariaDB [students]> INSERT INTO classes VALUES('900007', 'Introduction to Database Design', 'Computer Science', '5', '220516', '5105');
Query OK, 1 row affected (0.028 sec)

MariaDB [students]> INSERT INTO classes VALUES('900008', 'Introduction to Physics', 'Computer Science', '4', '220087', '2205');
Query OK, 1 row affected (0.032 sec)

MariaDB [students]> INSERT INTO classes VALUES('900009', 'Introduction to Political Science', 'Political Science', '5', '220337', '3308');
Query OK, 1 row affected (0.033 sec)

MariaDB [students]> select * from classes;
+-----+-----+-----+-----+-----+-----+
| Class_ID | Class_Name | Class_Category | Credits | Instructor_ID | Classroom |
+-----+-----+-----+-----+-----+-----+
| 900001 | Advanced_Calculus | Math | 5 | 220087 | 2201 |
| 900002 | Advanced Music Theory | Music | 3 | 220039 | 7012 |
| 900003 | American History | History | 5 | 220148 | 3305 |
| 900004 | Computer in Business | Computer Science | 2 | 220387 | 5115 |
| 900005 | Computer in Society | Computer Science | 2 | 220387 | 5117 |
| 900006 | Introduction to Biology | Biology | 5 | 220498 | 3112 |
| 900007 | Introduction to Database Design | Computer Science | 5 | 220516 | 5105 |
| 900008 | Introduction to Physics | Computer Science | 4 | 220087 | 2205 |
| 900009 | Introduction to Political Science | Political Science | 5 | 220337 | 3308 |
+-----+-----+-----+-----+-----+-----+

```

Creating Table Classes

2. Display all the rows from the table *student*:

Ans:

select * from students ;

```

MariaDB [students]> select * from students;
+-----+-----+-----+-----+-----+-----+
| Student_ID | StudFirst_Name | StudLast_Name | StudStreet_Address | StudCity | StudState | StudZipCode |
+-----+-----+-----+-----+-----+-----+
| 60001 | Zachary | Erlich | 1204 Bryant Road | Seattle | WA | 98125 |
| 60002 | Susan | McLain | 101 C Street, Apt. 32 | Redmond | WA | 98052 |
| 60003 | joe | Rosales | 201 Cherry Lane SE | Redmond | WA | 98078 |
| 60004 | Diana | Barlet | 4141 Lake City Way | Woodinville | WA | 98072 |
| 60005 | Tom | Wickerath | 2100 Mineola Avenue | Bellevue | WA | 98006 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.000 sec)

```

Table Students

3. Display all the rows for the student *Diana*:

Ans:

Select * from students where StudFirst_Name='Diana' ;

```
MariaDB [(none)]> use students;
Database changed
MariaDB [students]> Select *
-> from students
-> where StudFirst_Name='Diana';
+-----+-----+-----+-----+-----+-----+
| Student_ID | StudFirst_Name | StudLast_Name | StudStreet_Address | StudCity | StudState | StudZipCode |
+-----+-----+-----+-----+-----+-----+
| 60004 | Diana | Barlet | 4141 Lake City Way | Woodinville | WA | 98072 |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.002 sec)
```

Row of student Diana

4. Display the *name* and *address* of the student holding the ID#60005:

Ans:

select StudFirst_Name,StudLast_Name,StudStreet_Address
from students
where Student_ID = '60005';

```
MariaDB [students]> select StudFirst_Name,StudLast_Name,StudStreet_Address from students where Student_ID = '60005';
+-----+-----+-----+
| StudFirst_Name | StudLast_Name | StudStreet_Address |
+-----+-----+-----+
| Tom | Wickerath | 2100 Mineola Avenue |
+-----+-----+-----+
1 row in set (0.000 sec)
```

Information of Student ID #60005

5. Display all classes of Computer Science from the table class.

Ans:

select * from classes
where Class_Category = 'Computer Science';

```
MariaDB [students]> select * from classes where Class_Category = 'Computer Science';
+-----+-----+-----+-----+-----+-----+
| Class_ID | Class_Name | Class_Category | Credits | Instructor_ID | Classroom |
+-----+-----+-----+-----+-----+-----+
| 900004 | Computer in Business | Computer Science | 2 | 220387 | 5115 |
| 900005 | Computer in Society | Computer Science | 2 | 220387 | 5117 |
| 900007 | Introduction to Database Design | Computer Science | 5 | 220516 | 5105 |
| 900008 | Introduction to Physics | Computer Science | 4 | 220087 | 2205 |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.000 sec)
```

All Classes of Computer Science

6. Display all classes of Computer Science and Math from the table classes.

Ans:

```
select * from classes
where Class_Category= 'Computer Science' or Class_Category = 'Math';
```

```
MariaDB [students]> select * from classes where Class_Category='Computer Science' or Class_Category = 'Math';
+-----+-----+-----+-----+-----+-----+
| Class_ID | Class_Name | Class_Category | Credits | Instructor_ID | Classroom |
+-----+-----+-----+-----+-----+-----+
| 900001 | Advanced_Calculus | Math | 0 | 220087 | 2201 |
| 900004 | Computer in Business | Computer Science | 2 | 220387 | 5115 |
| 900005 | Computer in Society | Computer Science | 2 | 220387 | 5117 |
| 900007 | Introduction to Database Design | Computer Science | 5 | 220516 | 5105 |
| 900008 | Introduction to Physics | Computer Science | 4 | 220087 | 2205 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.000 sec)
```

All Classes of Computer Science and Math

7. Update the record of student “TOM”.

Ans:

```
update students set StudFirst_Name = 'Shanto' where StudFirst_Name= 'Tom';
```

```
MariaDB [students]> update students set StudFirst_Name = 'Shanto' where StudFirst_Name= 'Tom';
Query OK, 1 row affected (0.032 sec)
Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [students]> select * from students;
+-----+-----+-----+-----+-----+-----+
| Student_ID | StudFirst_Name | StudLast_Name | StudStreet_Address | StudCity | StudState | StudZipCode |
+-----+-----+-----+-----+-----+-----+
| 60001 | Zachary | Erlich | 1204 Bryant Road | Seattle | WA | 98125 |
| 60002 | Susan | McLain | 101 C Street, Apt. 32 | Redmond | WA | 98052 |
| 60003 | joe | Rosales | 201 Cherry Lane SE | Redmond | WA | 98078 |
| 60004 | Diana | Barlet | 4141 Lake City Way | Woodinville | WA | 98072 |
| 60005 | Shanto | Wickerath | 2100 Mineola Avenue | Bellevue | WA | 98006 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.000 sec)
```

Updating the records of “TOM”

8. Delete “Introduction to Biology” from the table classes.

Ans:

```
delete from classes where Class_Name = 'Introduction to Biology' ;
```

```
MariaDB [students]> delete from classes where Class_Name = 'Introduction to Biology' ;
Query OK, 1 row affected (0.038 sec)

MariaDB [students]> select * from classes;
+-----+-----+-----+-----+-----+-----+
| Class_ID | Class_Name | Class_Category | Credits | Instructor_ID | Classroom |
+-----+-----+-----+-----+-----+-----+
| 900001 | Advanced_Calculus | Math | 0 | 220087 | 2201 |
| 900002 | Advanced Music Theory | Music | 3 | 220039 | 7012 |
| 900003 | American History | History | 5 | 220148 | 3305 |
| 900004 | Computer in Business | Computer Science | 2 | 220387 | 5115 |
| 900005 | Computer in Society | Computer Science | 2 | 220387 | 5117 |
| 900007 | Introduction to Database Design | Computer Science | 5 | 220516 | 5105 |
| 900008 | Introduction to Physics | Computer Science | 4 | 220087 | 2205 |
| 900009 | Introduction to Political Science | Political Science | 5 | 220337 | 3308 |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.000 sec)
```

Deleting a Class Name from table Classes