

ASSIGNMENT-2**MySQL and MongoDB****CREATE IN MYSQL:**

The screenshot shows the MySQL Workbench interface. The 'Query' window contains the following SQL code:

```

1 • create database assignmet2;
2 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(1,'Harika','CSE','Vijayawada','9845735674');
3 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(2,'Ram','CSE','Rajamundry','9456379832');
4 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(3,'sarat','MECH','Hyderabad','7236789346');
5 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(4,'Heera','ECE','Banglore','8653964278');
6 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(5,'charan','BBA','Tamilnadu','7831278354');
7 • select * from assignmet2.university;

```

The 'Result Grid' shows the output of the SELECT statement:

sno	Student	Branch	Address	phoneno
3	sarat	MECH	Hyderabad	7236789346
5	charan	BBA	Tamilnadu	7831278354
4	Heera	ECE	Banglore	8653964278
2	Ram	CSE	Rajamundry	9456379832
1	Harika	CSE	Vijayawada	9845735674

The 'Output' window shows the execution log:

#	Time	Action	Message
12	13:30:10	Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(1,'Harika','CSE','Vijayawada','9845735674');	1 row(s) affected
13	13:31:17	Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(2,'Ram','CSE','Rajamundry','9456379832');	1 row(s) affected
14	13:33:16	Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(3,'sarat','MECH','Hyderabad','7236789346');	1 row(s) affected
15	13:33:23	Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(4,'Heera','ECE','Banglore','8653964278');	1 row(s) affected
16	13:34:18	Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(5,'charan','BBA','Tamilnadu','7831278354');	1 row(s) affected
17	13:34:43	select * from assignmet2.university LIMIT 0, 1000	5 row(s) returned

UPDATE COMMAND IN MYSQL:

The screenshot shows the MySQL Workbench interface. The 'Query' window contains the following SQL code:

```

1 • create database assignmet2;
2 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(1,'Harika','CSE','Vijayawada','9845735674');
3 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(2,'Ram','CSE','Rajamundry','9456379832');
4 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(3,'sarat','MECH','Hyderabad','7236789346');
5 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(4,'Heera','ECE','Banglore','8653964278');
6 • Insert into assignmet2.university(sno,Student,Branch,Address,phoneno) values(5,'charan','BBA','Tamilnadu','7831278354');
7 • select * from assignmet2.university;
8 • Update assignmet2.university set Branch='BBA' where phoneno='7236789346';

```

The 'Result Grid' shows the output of the SELECT statement:

sno	Student	Branch	Address	phoneno
3	sarat	BBA	Hyderabad	7236789346
5	charan	BBA	Tamilnadu	7831278354
4	Heera	ECE	Banglore	8653964278
2	Ram	CSE	Rajamundry	9456379832
1	Harika	CSE	Vijayawada	9845735674

The 'Output' window shows the execution log:

#	Time	Action	Message
19	13:43:18	Update assignmet2.university set Branch='ECE' where phoneno='7831278354'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
20	13:43:25	select * from assignmet2.university LIMIT 0, 1000	5 row(s) returned
21	13:44:47	Update assignmet2.university set Branch='BBA' where phoneno='7831278354'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
22	13:44:51	select * from assignmet2.university LIMIT 0, 1000	5 row(s) returned
23	13:45:30	Update assignmet2.university set Branch='BBA' where phoneno='7236789346'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
24	13:45:35	select * from assignmet2.university LIMIT 0, 1000	5 row(s) returned

DELETE COMMAND IN MYSQL:

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'assignment' and 'assignment2' expanded. The main editor shows a SQL script for the 'university' database. The script includes creating a database, inserting data, selecting all, updating a record, and deleting a record. The 'Result Grid' shows the execution of the DELETE command, which successfully removed a record with phoneno '9456379832'.

```
1 create database assignment2;
2 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(1,'Harika','CSE','Vijayawada','9845735674');
3 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(2,'Ram','CSE','Rajamundry','9456379832');
4 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(3,'sarat','MECH','Hyderabad','7236789346');
5 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(4,'Heera','ECE','Banglore','8653964278');
6 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(5,'charan','BBA','Tamilnadu','7831278354');
7 select * from assignment2.university;
8 update assignment2.university set Branch='BBA' where phoneno='7236789346';
9 DELETE from assignment2.university where phoneno='9456379832'
```

sno	Student	Branch	Address	phoneno
3	sarat	BBA	Hyderabad	7236789346
5	charan	BBA	Tamilnadu	7831278354
4	Heera	ECE	Banglore	8653964278
1	Harika	CSE	Vijayawada	9845735674

university 5 x

Output

#	Time	Action	Message
21	13:44:47	Update assignment2.university set Branch='BBA' where phoneno='7831278354'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
22	13:44:51	select * from assignment2.university LIMIT 0, 1000	5 row(s) returned
23	13:45:30	Update assignment2.university set Branch='BBA' where phoneno='7236789346'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
24	13:45:35	select * from assignment2.university LIMIT 0, 1000	5 row(s) returned
25	13:51:45	DELETE from assignment2.university where phoneno='9456379832'	1 row(s) affected
26	13:51:51	select * from assignment2.university LIMIT 0, 1000	4 row(s) returned

CREATING RELATIONAL TABLES IN MYSQL:

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'assignment2' expanded. The main editor shows a SQL script for the 'assignment2' database. The script includes creating a table 'FACULTY' with a primary key 'SNO' and a foreign key 'DEPARTMENTID' referencing 'DEPARTMENT'. It also includes inserting data into 'DEPARTMENT' and 'FACULTY'. The 'Result Grid' shows the execution of the CREATE TABLE command, which successfully created the 'FACULTY' table.

```
5 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(4,'Heera','ECE','Banglore','8653964278');
6 insert into assignment2.university(sno,Student,Branch,Address,phoneno) values(5,'charan','BBA','Tamilnadu','7831278354');
7 select * from assignment2.university;
8 update assignment2.university set Branch='BBA' where phoneno='7236789346';
9 DELETE from assignment2.university where phoneno='9456379832';
10 create TABLE assignment2.FACULTY(SNO INT,DEPARTMENTID INT,FACULTYID INT,FACULTYNAME VARCHAR(25), PRIMARY KEY(SNO),
11 FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));
12 insert into assignment2.DEPARTMENT VALUES (1,1,'CSE');
13 insert into assignment2.DEPARTMENT VALUES (2,3,'ECE');
14 insert into assignment2.DEPARTMENT VALUES (3,2,'MECH');
15 insert into assignment2.DEPARTMENT VALUES (4,20,'MATH');
16 insert into assignment2.DEPARTMENT VALUES (5,23,'ENG');
17 select * from assignment2.department order by sno;
```

sno	departmentid	departmentName
1	1	CSE
2	3	ECE
3	2	MECH
4	20	MATH
5	23	ENG

department 8 x

Output

#	Time	Action	Message
37	15:21:37	select * from assignment2.department LIMIT 0, 1000	5 row(s) returned
38	15:22:07	select * from assignment2.department order by sno LIMIT 0, 1000	5 row(s) returned
39	15:23:59	create TABLE assignment2.STUDENT(SNO INT,DEPARTMENTID INT,STUDENTID INT,STUDENTNAME VARCHAR(25), PRIMARY KEY(SNO), FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));	Error Code: 1064. 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 'create TABLE assignment2.STUDENT(SNO INT,DEPARTMENTID INT,STUDENTID INT,STUDENTNAME VARCHAR(25), PRIMARY KEY(SNO), FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));' at line 1
40	15:24:58	create TABLE assignment2.CHILD(SNO INT,DEPARTMENTID INT,STUDENTID INT,STUDENTNAME VARCHAR(25), PRIMARY KEY(SNO), FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));	Error Code: 1050. Table 'student' already exists
41	15:25:24	create TABLE assignment2.CHILD(SNO INT,DEPARTMENTID INT,STUDENTID INT,STUDENTNAME VARCHAR(25), PRIMARY KEY(SNO), FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));	0 row(s) affected
42	15:26:02	select * from assignment2.department order by sno LIMIT 0, 1000	5 row(s) returned

SQL Script:

```

16 • Insert into assignmet2.DEPARTMENT VALUES (5,23,'ENG');
17 • select * from assignmet2.department order by sno;
18 • create TABLE assignmet2.CHILD(SNO INT,DEPARTMENTID INT,STUDENTID INT,STUDENTYNAME VARCHAR(25) , PRIMARY KEY(SNO),
19 FOREIGN KEY(DEPARTMENTID) REFERENCES DEPARTMENT(DEPARTMENTID));
20 • Insert into assignmet2.FACULTY VALUES (1,1,203,'Rajesh');
21 • Insert into assignmet2.FACULTY VALUES (2,1,300,'chandu');
22 • Insert into assignmet2.FACULTY VALUES (3,3,203,'Rakesh');
23 • Insert into assignmet2.FACULTY VALUES (4,20,280,'sheela');
24 • Insert into assignmet2.FACULTY VALUES (5,2,450,'Naresh');
25 • select * from assignmet2.FACULTY ORDER BY SNO;

```

Result Grid:

SNO	DEPARTMENTID	FACULTYID	FACULTYNAME
1	1	203	Rajesh
2	1	300	chandu
3	3	203	Rakesh
4	20	280	sheela
5	2	450	Naresh

Output:

#	Time	Action	Message
48	15:31:42	Insert into assignmet2.FACULTY VALUES (4,20,280,'sheela')	1 row(s) affected
49	15:31:51	Insert into assignmet2.FACULTY VALUES (5,2,450,'Naresh')	1 row(s) affected
50	15:33:00	Insert into assignmet2.CHILD VALUES (1,1,7910,'Prashanth')	1 row(s) affected
51	15:33:03	Insert into assignmet2.CHILD VALUES (2,2,6790,'Ramu')	1 row(s) affected
52	15:33:42	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	Error Code: 1049. Unknown database 'assignmet2'
53	15:34:22	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	5 row(s) returned

INNER JOIN:

SQL Script:

```

23 • Insert into assignmet2.FACULTY VALUES (4,20,280,'sheela');
24 • Insert into assignmet2.FACULTY VALUES (5,2,450,'Naresh');
25 • select * from assignmet2.FACULTY ORDER BY SNO;
26
27 • SELECT * FROM assignmet2.department JOIN assignmet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACULTY.DEPARTMENTID;

```

Result Grid:

sno	departmentid	departmentName	SNO	DEPARTMENTID	FACULTYID	FACULTYNAME
1	1	CSE	1	1	203	Rajesh
1	1	CSE	2	1	300	chandu
3	2	MECH	5	2	450	Naresh
2	3	ECE	3	3	203	Rakesh
4	20	MATH	4	20	280	sheela

Output:

#	Time	Action	Message
50	15:33:00	Insert into assignmet2.CHILD VALUES (1,1,7910,'Prashanth')	1 row(s) affected
51	15:33:03	Insert into assignmet2.CHILD VALUES (2,2,6790,'Ramu')	1 row(s) affected
52	15:33:42	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	Error Code: 1049. Unknown database 'assignmet2'
53	15:34:22	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	5 row(s) returned
54	15:36:55	SELECT * FROM assignmet2.department JOIN assignmet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACULTY.DEPARTMENTID	5 row(s) returned

LEFT JOIN:

SQL Script:

```

23 • Insert into assignmet2.FACULTY VALUES (4,20,280,'sheela');
24 • Insert into assignmet2.FACULTY VALUES (5,2,450,'Naresh');
25 • select * from assignmet2.FACULTY ORDER BY SNO;
26
27 • SELECT * FROM assignmet2.department LEFT JOIN assignmet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACULTY.DEPARTMENTID;

```

Result Grid:

sno	departmentid	departmentName	SNO	DEPARTMENTID	FACULTYID	FACULTYNAME
1	1	CSE	1	1	203	Rajesh
1	1	CSE	2	1	300	chandu
3	2	MECH	5	2	450	Naresh
2	3	ECE	3	3	203	Rakesh
4	20	MATH	4	20	280	sheela
5	23	ENG				

Output:

#	Time	Action	Message
51	15:33:03	Insert into assignmet2.CHILD VALUES (2,2,6790,'Ramu')	1 row(s) affected
52	15:33:42	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	Error Code: 1049. Unknown database 'assignmet2'
53	15:34:22	select * from assignmet2.FACULTY ORDER BY SNO LIMIT 0, 1000	5 row(s) returned
54	15:36:55	SELECT * FROM assignmet2.department JOIN assignmet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACULTY.DEPARTMENTID	5 row(s) returned
55	15:36:55	SELECT * FROM assignmet2.department LEFT JOIN assignmet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACULTY.DEPARTMENTID	6 row(s) returned

RIGHT JOIN:

Filter objects

- assignment
 - Tables
 - Views
 - Stored Procedures
- Functions
 - assignment2
 - Tables
 - child
 - department
 - student
 - faculty
 - university
 - Views
 - Stored Procedures
 - Functions
 - sys

Administration Schemas

Information

No object selected

```

23 • Insert into assignmnet2.FACULTY VALUES (4,20,280,'sheela');
24 • Insert into assignmnet2.FACULTY VALUES (5,2,450,'Naresh');
25 • select * from assignmnet2.FACULTY ORDER BY SNO;
26
27 • SELECT * FROM assignmnet2.department RIGHT JOIN assignmnet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACTULTY.DEPARTMENTID;
  
```

Result Grid

sno	departmentid	departmentName	SNO	DEPARTMENTID	FACULTYID	FACULTYNAME
1	1	CSE	1	1	203	Rajesh
1	1	CSE	2	1	300	chandu
2	3	ECE	3	3	203	Rakesh
4	20	MATH	4	20	280	sheela
3	2	MECH	5	2	450	Naresh

Result 12 x

Output

Read Only

FULL JOIN:

Tables

Views

Stored Procedures

Functions

assignment2

- Tables
 - child
 - department
 - student
 - faculty
 - university
- Views
- Stored Procedures
- Functions

Administration Schemas

Information

Schema: assignmnet2

```

25 • select * from assignmnet2.FACULTY ORDER BY SNO;
26
27 • SELECT * FROM assignmnet2.department FULL JOIN assignmnet2.FACULTY
  
```

Result Grid

sno	departmentid	departmentName	SNO	DEPARTMENTID	FACULTYID	FACULTYNAME
5	23	ENG	1	1	203	Rajesh
4	20	MATH	1	1	203	Rajesh
2	3	ECE	1	1	203	Rajesh
3	2	MECH	1	1	203	Rajesh
1	1	CSE	1	1	203	Rajesh
5	23	ENG	2	1	300	chandu
4	20	MATH	2	1	300	chandu
2	3	ECE	2	1	300	chandu
3	2	MECH	2	1	300	chandu
1	1	CSE	2	1	300	chandu
5	23	ENG	3	3	203	Rakesh
4	20	MATH	3	3	203	Rakesh
2	3	ECE	3	3	203	Rakesh
3	2	MECH	3	3	203	Rakesh
1	1	CSE	3	3	203	Rakesh
5	23	ENG	4	20	280	sheela
4	20	MATH	4	20	280	sheela
2	3	ECE	4	20	280	sheela
3	2	MECH	4	20	280	sheela
1	1	CSE	4	20	280	sheela
5	23	ENG	5	2	450	Naresh
4	20	MATH	5	2	450	Naresh

Result 13 x


Output

Action Output

#	Time	Action	Message
54	15:25:55	SELECT * FROM assignmnet2.department FULL JOIN assignmnet2.FACULTY ON DEPARTMENT.DEPARTMENTID=FACTULTY.DEPARTMENTID	Successfully executed

MONGODB:

Create:



Filter Type a query: { field: 'value' } Reset Find ↔ More Options

ADD DATA EXPORT DATA 1-3 of 3 ↶ ↷ ≡ 🔍 📄


```
{ "_id": "ObjectId('647335c1b265ac6f746d558f')", "studentName": "Rajesh" }
```

```
{ "_id": "ObjectId('647336a1b265ac6f746d5590')", "studentName": "Kavya", "age": 20 }
```

```
{ "_id": "ObjectId('647336bfb265ac6f746d5591')", "studentName": "chitralekha", "age": 20 }
```

```
> MONGODB
> db.student.insertOne({ "studentName": "Kavya", "age": 20 })
< {
  acknowledged: true,
  insertedId: ObjectId("647336a1b265ac6f746d5590")
}
> db.student.insertOne({ "studentName": "chitralekha", "age": 20 })
< {
  acknowledged: true,
  insertedId: ObjectId("647336bfb265ac6f746d5591")
}
```

Update:



Search

Documents Aggregations Schema Explain Plan Indexes Validation

Filter Type a query: { field: 'value' } Reset Find ↔ More Options

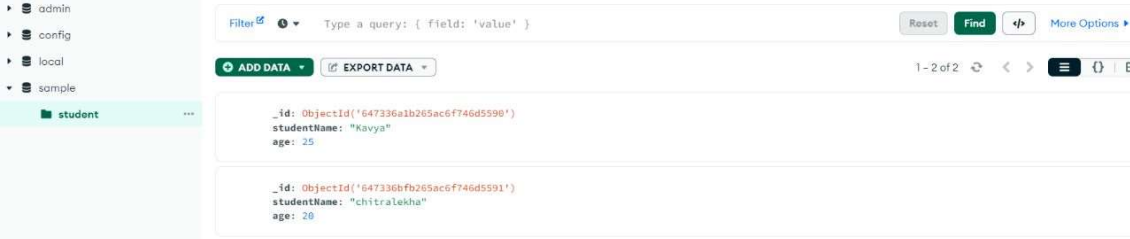
ADD DATA EXPORT DATA 1-3 of 3 ↶ ↷ ≡ 🔍 📄

```
{ "_id": "ObjectId('647335c1b265ac6f746d558f')", "studentName": "Rajesh" }
```

```
{ "_id": "ObjectId('647336a1b265ac6f746d5590')", "studentName": "Kavya", "age": 25 }
```

```
> MONGODB
> db.student.updateOne({ studentName: 'Kavya' }, { $set: { age: 25 } })
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
sample>
```

Delete:



Filter Type a query: { field: 'value' } Reset Find ↔ More Options

ADD DATA EXPORT DATA 1-2 of 2 ↶ ↷ ≡ 🔍 📄

```
{ "_id": "ObjectId('647336a1b265ac6f746d5590')", "studentName": "Kavya", "age": 25 }
```

```
{ "_id": "ObjectId('647336bfb265ac6f746d5591')", "studentName": "chitralekha", "age": 20 }
```

```
> MONGODB
> db.student.deleteOne({ studentName: 'Rajesh' })
< {
  acknowledged: true,
  deletedCount: 1
}
sample>
```

