

## ASSESSMENT – 2

1)To create, update delete commands in mysql

Code:

```
1
2 CREATE TABLE students (
3     id INTEGER PRIMARY KEY,
4     name VARCHAR(20),
5     state VARCHAR(30),
6     age INT
7 );
8
9 INSERT INTO students VALUES (1, 'Ravi','Punjab',21);
10 INSERT INTO students VALUES (2, 'Kumar','Kerala',25);
11 INSERT INTO students VALUES (3, 'Sai','Bihar',24);
12 INSERT INTO students VALUES (4, 'Harsh','Andhra',22);
13 INSERT INTO students VALUES (5, 'Karthi','Gujarat',23);
14
15 SELECT * FROM students;
16
```

### Output

id	name	state	age
1	Ravi	Punjab	21
2	Kumar	Kerala	25
3	Sai	Bihar	24
4	Harsh	Andhra	22
5	Karthi	Gujarat	23

## Update:

```
1
2 CREATE TABLE students (
3     id INTEGER PRIMARY KEY,
4     name VARCHAR(20),
5     state VARCHAR(30),
6     age INT
7 );
8
9 INSERT INTO students VALUES (1, 'Ravi', 'Punjab', 21);
10 INSERT INTO students VALUES (2, 'Kumar', 'Kerala', 25);
11 INSERT INTO students VALUES (3, 'Sai', 'Bihar', 24);
12 INSERT INTO students VALUES (4, 'Harsh', 'Andhra', 22);
13 INSERT INTO students VALUES (5, 'Karthi', 'Gujarat', 23);
14
15 UPDATE students SET name = 'Kavin' WHERE id=2;
16
```

## Output

id	name	state	age
1	Ravi	Punjab	21
2	Kavin	Kerala	25
3	Sai	Bihar	24
4	Harsh	Andhra	22
5	Karthi	Gujarat	23

Delete:

```
1
2 CREATE TABLE students (
3     id INTEGER PRIMARY KEY,
4     name VARCHAR(20),
5     state VARCHAR(30),
6     age INT
7 );
8
9 INSERT INTO students VALUES (1, 'Ravi', 'Punjab', 21);
10 INSERT INTO students VALUES (2, 'Kumar', 'Kerala', 25);
11 INSERT INTO students VALUES (3, 'Sai', 'Bihar', 24);
12 INSERT INTO students VALUES (4, 'Harsh', 'Andhra', 22);
13 INSERT INTO students VALUES (5, 'Karthi', 'Gujarat', 23);
14
15 UPDATE students SET name = 'Kavin' WHERE id=2;
16 DELETE FROM students WHERE id=3;
17
18 SELECT * FROM students;
19
```

### Output

id	name	state	age
1	Ravi	Punjab	21
2	Kavin	Kerala	25
4	Harsh	Andhra	22
5	Karthi	Gujarat	23

## 2) Create tables and joins in mysql

### Creating tables

```
1
2 CREATE TABLE students (
3     s_id INTEGER PRIMARY KEY,
4     s_name VARCHAR(20),
5     s_mark INT
6
7 );
8 INSERT INTO students VALUES (1, 'Ravi', 58);
9 INSERT INTO students VALUES (2, 'Kumar', 97);
10 INSERT INTO students VALUES (3, 'Sai', 89);
11 INSERT INTO students VALUES (4, 'Harsh', 76);
12 INSERT INTO students VALUES (5, 'Karthi', 90);
13
14 CREATE TABLE teachers(
15     t_id INTEGER PRIMARY KEY,
16     t_name VARCHAR(20),
17     t_sub VARCHAR(10)
18 );
19 INSERT INTO teachers VALUES (2, 'Kavin', 'ENG');
20 INSERT INTO teachers VALUES (3, 'Sankar', 'SC');
21 INSERT INTO teachers VALUES (7, 'Rajesh', 'MATHS');
22 INSERT INTO teachers VALUES (1, 'Kapil', 'BIO');
23 INSERT INTO teachers VALUES (6, 'Ramesh', 'PHY');
24 SELECT*FROM students;
25 SELECT*FROM teachers;
```

### Output

s_id	s_name	s_mark
1	Ravi	58
2	Kumar	97
3	Sai	89
4	Harsh	76
5	Karthi	90

  

t_id	t_name	t_sub
1	Kapil	BIO
2	Kavin	ENG
3	Sankar	SC
6	Ramesh	PHY
7	Rajesh	MATHS

## Perform joins

### INNER JOIN

```
2 CREATE TABLE students (  
3   s_id INTEGER PRIMARY KEY,  
4   s_name VARCHAR(20),  
5   s_mark INT  
6 )  
7 );  
8 INSERT INTO students VALUES (1, 'Ravi',58);  
9 INSERT INTO students VALUES (2, 'Kumar',97);  
10 INSERT INTO students VALUES (3, 'Sai',89);  
11 INSERT INTO students VALUES (4, 'Harsh',76);  
12 INSERT INTO students VALUES (5, 'Karthi',90);  
13  
14 CREATE TABLE teachers(  
15   t_id INTEGER PRIMARY KEY,  
16   t_name VARCHAR(20),  
17   t_sub VARCHAR(10)  
18 );  
19 INSERT INTO teachers VALUES (2, 'Kavin','ENG');  
20 INSERT INTO teachers VALUES (3, 'Sankar','SC');  
21 INSERT INTO teachers VALUES (7, 'Rajesh','MATHS');  
22 INSERT INTO teachers VALUES (1, 'Kapil','BIO');  
23 INSERT INTO teachers VALUES (6, 'Ramesh','PHY');  
24 SELECT students.s_name,students.s_mark,teachers.t_name,teachers.t_sub  
25 FROM students  
26 INNER JOIN teachers ON students.s_id=teachers.t_id;
```

### Output

s_name	s_mark	t_name	t_sub
Ravi	58	Kapil	BIO
Kumar	97	Kavin	ENG
Sai	89	Sankar	SC

## LEFT JOIN

```
2 CREATE TABLE students (  
3   s_id INTEGER PRIMARY KEY,  
4   s_name VARCHAR(20),  
5   s_mark INT  
6  
7 );  
8 INSERT INTO students VALUES (1, 'Ravi',58);  
9 INSERT INTO students VALUES (2, 'Kumar',97);  
10 INSERT INTO students VALUES (3, 'Sai',89);  
11 INSERT INTO students VALUES (4, 'Harsh',76);  
12 INSERT INTO students VALUES (5, 'Karthi',90);  
13  
14 CREATE TABLE teachers(  
15   t_id INTEGER PRIMARY KEY,  
16   t_name VARCHAR(20),  
17   t_sub VARCHAR(10)  
18 );  
19 INSERT INTO teachers VALUES (2, 'Kavin','ENG');  
20 INSERT INTO teachers VALUES (3, 'Sankar','SC');  
21 INSERT INTO teachers VALUES (7, 'Rajesh','MATHS');  
22 INSERT INTO teachers VALUES (1, 'Kapil','BIO');  
23 INSERT INTO teachers VALUES (6, 'Ramesh','PHY');  
24 SELECT students.s_name,students.s_mark,teachers.t_name,teachers.t_sub  
25 FROM students  
26 LEFT JOIN teachers ON students.s_id=teachers.t_id;
```

## Output

s_name	s_mark	t_name	t_sub
Ravi	58	Kapil	BIO
Kumar	97	Kavin	ENG
Sai	89	Sankar	SC
Harsh	76	NULL	NULL
Karthi	90	NULL	NULL

## RIGHT JOIN

```
2 CREATE TABLE students (  
3   s_id INTEGER PRIMARY KEY,  
4   s_name VARCHAR(20),  
5   s_mark INT  
6 )  
7 );  
8 INSERT INTO students VALUES (1, 'Ravi', 58);  
9 INSERT INTO students VALUES (2, 'Kumar', 97);  
10 INSERT INTO students VALUES (3, 'Sai', 89);  
11 INSERT INTO students VALUES (4, 'Harsh', 76);  
12 INSERT INTO students VALUES (5, 'Karthi', 90);  
13  
14 CREATE TABLE teachers(  
15   t_id INTEGER PRIMARY KEY,  
16   t_name VARCHAR(20),  
17   t_sub VARCHAR(10)  
18 );  
19 INSERT INTO teachers VALUES (2, 'Kavin', 'ENG');  
20 INSERT INTO teachers VALUES (3, 'Sankar', 'SC');  
21 INSERT INTO teachers VALUES (7, 'Rajesh', 'MATHS');  
22 INSERT INTO teachers VALUES (1, 'Kapil', 'BIO');  
23 INSERT INTO teachers VALUES (6, 'Ramesh', 'PHY');  
24 SELECT students.s_name, students.s_mark, teachers.t_name, teachers.t_sub  
25 FROM students  
26 RIGHT JOIN teachers ON students.s_id=teachers.t_id;
```

## Output

s_name	s_mark	t_name	t_sub
Ravi	58	Kapil	BIO
Kumar	97	Kavin	ENG
Sai	89	Sankar	SC
NULL	NULL	Ramesh	PHY
NULL	NULL	Rajesh	MATHS

## CROSS JOINS

```
2 CREATE TABLE students (  
3   s_id INTEGER PRIMARY KEY,  
4   s_name VARCHAR(20),  
5   s_mark INT  
6 )  
7 );  
8 INSERT INTO students VALUES (1, 'Ravi',58);  
9 INSERT INTO students VALUES (2, 'Kumar',97);  
10 INSERT INTO students VALUES (3, 'Sai',89);  
11 INSERT INTO students VALUES (4, 'Harsh',76);  
12 INSERT INTO students VALUES (5, 'Karthi',90);  
13  
14 CREATE TABLE teachers(  
15 t_id INTEGER PRIMARY KEY,  
16 t_name VARCHAR(20),  
17 t_sub VARCHAR(10)  
18 );  
19 INSERT INTO teachers VALUES (2, 'Kavin','ENG');  
20 INSERT INTO teachers VALUES (3, 'Sankar','SC');  
21 INSERT INTO teachers VALUES (7, 'Rajesh','MATHS');  
22 INSERT INTO teachers VALUES (1, 'Kapil','BIO');  
23 INSERT INTO teachers VALUES (6, 'Ramesh','PHY');  
24 SELECT students.s_name,students.s_mark,teachers.t_name,teachers.t_sub  
25 FROM students  
26 CROSS JOIN teachers ON students.s_id=teachers.t_id;
```

## Output

s_name	s_mark	t_name	t_sub
Ravi	58	Kapil	BIO
Kumar	97	Kavin	ENG
Sai	89	Sankar	SC



### 3) To create, update, delete commands in mongo

Create :

The screenshot shows the MongoDB Compass interface for a local instance at localhost:27017. The 'Sample.student' collection is selected. The 'Documents' tab is active, showing a single document with the following fields: `_id` (ObjectId), `studentName` (abc), and `age` (18). The 'My Queries' panel on the left shows the 'student' collection selected. The 'MONGOOSH' terminal at the bottom displays the command `db.student.insertOne({'studentName': 'abc', 'age': 18})` and its output, which includes `acknowledged: true` and `insertedId`.

Update:

The screenshot shows the MongoDB Compass interface for a local instance at localhost:27017. The 'Sample.student' collection is selected. The 'Documents' tab is active, showing two documents. The first document has `studentName` 'sathya' and `age` '20'. The second document has `studentName` 'sathya1' and `age` '21'. The 'MONGOOSH' terminal at the bottom displays the command `db.student.updateOne({'studentName': 'sathya'}, {'$set: {age: '20'}})` and its output, which includes `acknowledged: true`, `insertedId: null`, `matchedCount: 1`, `modifiedCount: 1`, and `upsertedCount: 0`.

## Delete:

The screenshot displays the MongoDB Compass interface and a terminal window. In the top section, the 'localhost:27017' connection is active, and the 'Sample.student' collection is selected. The 'Documents' tab shows a single document with the following fields: `_id` (ObjectId), `studentName` ('sathya1'), and `age` ('21'). The bottom section shows a terminal window with the following commands and output:

```
> MONGODB
> use sample
> db.student.deleteOne({studentName:"sathya"})
{
  acknowledged: true,
  deletedCount: 1
}
test>
```

The terminal output confirms that the document was successfully deleted, as indicated by the `deletedCount: 1` and `acknowledged: true` fields.