

NAME:	DEEPANSHU AGGARWAL, VAISHNAVI BORKAR, UTSAV AVAIYA
SEMESTER:	3 RD SEMESTER
UID'S:	2021300002,2021300016,2021300005
BRANCH:	COMPS A
BATCH:	A1
SUBJECT:	DBMS
EXP:	EXPERIMENT 2
AIM:	To create a database and populate using SQL commands (With constraints).
STATEMENT AND ER DIAGRAM :	<p>Q. Design a MYSQL database for coaching system centre management system. The "coaching" centre has a relationship with entities student, faculty, courses. The conceptual model / ER diagram is shown below.</p> <pre> erDiagram Student --o{ Courses : Enroll Faculty --o{ Courses : "taught by" Student --o{ Engineering : "IS A" Student --o{ Medical : "IS A" Student { string S-id PK string Address string Contact-no string S-name string Course_Taken } Courses { string Course_Code PK int Total_Seats string Course_Name string Start_Date int Fee } Faculty { string F-id PK int Age string Name string Subject } Engineering { string S-id PK } Medical { string S-id PK } </pre>
PROGRAM:	<p><u>CREATING AND ENTERING VALUES IN COURSE TABLE</u></p> <p>CREATE TABLE Courses(Course_Code INT not null, Total_Seats INT, Course_Name VARCHAR(20),StartDate VARCHAR(10),Fee INT not null, primary key(Course_Code));</p>

```

INSERT INTO courses VALUES(1011,60,"JEE","10\4\2",150000);

INSERT INTO courses VALUES(1012,60,"JEE ADVANCED","12\4\2",180000);

INSERT INTO courses VALUES(1013,70,"NEET","8\4\2",130000);

INSERT INTO courses VALUES(1014,70,"NEET PG","10\4\2",170000);

INSERT INTO courses VALUES(1015,120,"GATE","4\7\2",100000);

```

CREATING AND ENTERING VALUES IN FACULTY TABLE

```

CREATE TABLE Faculty( F_id int not null,Subject VARCHAR(20),Name VARCHAR(30),
age int not null, primary key(F_id));

INSERT INTO faculty VALUES(001,"MATHEMATICS","GAJENDRA PUROHIT",50);

INSERT INTO faculty VALUES(002,"PHYSICS","AMAN AGGARWAL",35);

INSERT INTO faculty VALUES(003,"CHEMISTRY","RONAK PATEL",40);

INSERT INTO faculty VALUES(004,"MATHEMATICS","NEHA AGRAWAL",30);

INSERT INTO faculty VALUES(005,"SCIENCE","ALAKH PANDEY",36);

INSERT INTO faculty VALUES(006,"ZOOLOGY","SAKSHI PANDEY",29);

INSERT INTO faculty VALUES(007,"BOTANY","POONAM RAWAT",29);

INSERT INTO faculty VALUES(008,"ZOOLOGY ADV","ANKIT SHARMA",48);

INSERT INTO faculty VALUES(009,"BOTANY ADV","POOJA MATRE",41);

INSERT INTO faculty VALUES(010,"ENG MATHEMATICS","VAISHNAVI BORKAR",58);

INSERT INTO faculty VALUES(011,"ENG PHYSICS","UTSAV AVAIYA",28);

INSERT INTO faculty VALUES(012,"COMP PROGRAMMING","DEEPANSHU
AGGARWAL",24);

```

CREATING AND ENTERING VALUES IN FIELD TABLE

```
CREATE TABLE FIELD(S_NO INT, FIELD_T VARCHAR(30));
```

```
ALTER TABLE field ADD PRIMARY KEY(S_NO);
```

```
INSERT INTO FIELD VALUES(1,"Engineering Student");
```

```
INSERT INTO FIELD VALUES(2,"Medical Student");
```

CREATING AND ENTERING VALUES IN STUDENT TABLE

```
CREATE TABLE STUDENT(S_NAME VARCHAR(20), S_ID INT, ADDRESS VARCHAR(50),  
CONTACT_NO VARCHAR(10),field_NO INT);
```

```
ALTER TABLE STUDENT ADD PRIMARY KEY(S_ID);
```

```
INSERT INTO student VALUES("DEEP",2001,"JAMMU","700606****",1);
```

```
INSERT INTO student VALUES("DEEPAK",2002,"LUDHIANA","990628****",1);
```

```
INSERT INTO student VALUES("TARAK",2003,"GUJRAT","98761****",1);
```

```
INSERT INTO student VALUES("DHARA",2004,"WESTBENGAL","700606****",1);
```

```
INSERT INTO student VALUES("ANKITA",2005,"AMRITSAR","785426****",2);
```

```
INSERT INTO student VALUES("VASUDHA",2006,"RAIGARH","659823****",2);
```

```
INSERT INTO student VALUES("TOMPER",2007,"MUMBAI","983467****",1);
```

```
INSERT INTO student VALUES("VINEET",2008,"KOLABA","981167****",1);
```

```
INSERT INTO student VALUES("JUSTIN",2009,"AMSTERDAM","663467****",1);
```

CREATING AND ENTERING VALUES IN TAUGHT BY TABLE

```
CREATE TABLE taught_by(Course_Code INT, F_id INT, foreign key(Course_Code)  
references Courses(Course_Code),foreign key(F_id) references Faculty(F_id));
```

```
insert into taught_by values(1011,9);
```

```
insert into taught_by values(1011,11);
```

```
insert into taught_by values(1011,1);
```

insert into taught_by values(1011,12);

insert into taught_by values(1013,2);

insert into taught_by values(1015,3);

insert into taught_by values(1011,4);

insert into taught_by values(1012,5);

insert into taught_by values(1014,6);

insert into taught_by values(1013,8);

insert into taught_by values(1015,7);

insert into taught_by values(1011,10);

CREATING AND ENTERING VALUES IN ENROLLMENT TABLE

CREATE TABLE taught_by(Course_Code INT, S_id INT, foreign key(Course_Code) references Courses(Course_Code),foreign key(S_id) references Student(S_id));

insert into enrollment values(2001,1011);

insert into enrollment values(2002,1015);

insert into enrollment values(2003,1013);

insert into enrollment values(2004,1011);

insert into enrollment values(2005,1012);

insert into enrollment values(2006,1014);

insert into enrollment values(2007,1013);

insert into enrollment values(2008,1015);

insert into enrollment values(2009,1011);

RESULT:

COURSE TABLE

FirstMySQLConnection: multiple query results

FirstMySQLConnection: 5 records on 'courses' table

Course_Code	Total_Seats	Course_Name	StartDate	Fee
abc Filter...	abc Filter...	abc Filter...	abc Filter...	abc Filter...
1011	60	JEE	1042	150000
1012	60	JEE ADVANCED	1242	180000
1013	70	NEET	842	130000
1014	70	NEET PG	1042	170000
1015	120	GATE	472	100000

FACULTY TABLE

F_id	Subject	Name	age
abc Filter...	abc Filter...	abc Filter...	abc Filter...
1	MATHEMATICS	GAJENDRA PUROHIT	50
2	PHYSICS	AMAN AGGARWAL	35
3	CHEMISTRY	RONAK PATEL	40
4	MATHEMATICS	NEHA AGRAWAL	30
5	SCIENCE	ALAKH PANDEY	36
6	ZOOLOGY	SAKSHI PANDEY	29
7	BOTANY	POONAM RAWAT	29
8	ZOOLOGY ADV	ANKIT SHARMA	48
9	BOTANY ADV	POOJA MATRE	41
10	ENG MATHEMATICS	VAISHNAVI BORKAR	58
11	ENG PHYSICS	UTSAV AVAIYA	28
12	COMP PROGRAMMING	DEEPANSHU AGGARW...	24

STUDENT TABLE

S_NAME	S_ID	ADDRESS	CONTACT_NO	field_NO
<div>abc Filter...</div>	<div>abc Filter...</div>	<div>abc Filter...</div>	<div>abc Filter...</div>	<div>abc Filter...</div>
DEEP	2001	JAMMU	700606****	1
DEEPAK	2002	LUDHIANA	990628****	1
TARAK	2003	GUJRAT	98761****	1
DHARA	2004	WESTBENGAL	700606****	1
ANKITA	2005	AMRITSAR	785426****	2
VASUDHA	2006	RAIGARH	659823****	2
TOMPER	2007	MUMBAI	983467****	1
VINEET	2008	KOLABA	981167****	1
JUSTIN	2009	AMSTERDAM	663467****	1

FIELD TABLE

<div><div></div>FirstMySQLConnection: 5 records on 'courses' table</div>		
S_NO	FIELD_T	
<div>abc Filter...</div>	<div>abc Filter...</div>	
1	Engineering Student	
2	Medical Student	

ENROLLMENT TABLE

S_ID	Course_Code	
<div>abc Filter...</div>	<div>abc Filter...</div>	
2001	1011	
2002	1015	
2003	1013	
2004	1011	
2005	1012	
2006	1014	
2007	1013	
2008	1015	
2009	1011	

TAUGHT_BY

Course_Code	F_id	
abc Filter...	abc Filter...	
1011	9	
1011	11	
1011	1	
1011	12	
1013	2	
1015	3	
1011	4	
1012	5	
1014	6	
1013	8	
1015	7	
1011	10	

CONCLUSION :

Successfully created tables using multiple commands . We used alter table , drop table , primary key , foreign key etc.