

DBMS ASSIGNMENT

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ROLL NO: 20BCS009

SUBJECT: DBMS ASSIGNMENT

DATE OF SUBMISSION:

21/02/2022

- show databases;
- use 20bcs009;
- show tables;

```
department
product_master
salesman_master
sman_mast
stud_member
```

- create table department (DeptID int not null primary key, DeptName varchar(30) not null);
- desc department;

```
mysql> desc department;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| DeptID | int | NO | PRI | NULL | |
| DeptName | varchar(30) | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
```

- insert into department values(1, "Information Technology");
- insert into department values(2, "Electrical");
- insert into department values(3, "Civil");
- insert into department values(4, "Mechanical");
- insert into department values(5, "Chemical");

- select * from department;

```
mysql> select * from department;
```

DeptID	DeptName
1	Information Technology
2	Electrical
3	Civil
4	Mechanical
5	Chemical

```
5 rows in set (0.00 sec)
```

- create table stud_member(RollNO int not null, FName varchar(20) not null, MName varchar(20) not null, SName varchar(20) not null, DeptID int not null, Semester int not null, ContactNo int not null, Gender varchar(1) not null, FOREIGN KEY (DeptID) REFERENCES department (DeptID));
- desc stud_member;

```
mysql> desc stud_member;
```

Field	Type	Null	Key	Default	Extra
RollNO	int	NO		NULL	
FName	varchar(20)	NO		NULL	
MName	varchar(20)	NO		NULL	
SName	varchar(20)	NO		NULL	
DeptID	int	NO	MUL	NULL	
Semester	int	NO		NULL	
ContactNo	int	NO		NULL	
Gender	varchar(1)	NO		NULL	

- insert into stud_member values(1, "Ankur", "Samir", "Kahar", 1, 1 , 272121, "M");
- insert into stud_member values(2, "Dhaval", "Dhiren", "Joshi", 1, 1 , 232122, "M");
- insert into stud_member values(3, "Ankita", "Biren", "Shah", 1, 1 , 112121, "F");
- insert into stud_member values(10, "Komal", "MaheshKumar", "Pandya", 2, 3 , 123123, "F");
- insert into stud_member values(13, "Amit", "JitenKumar", "Mehta", 3, 3 , 453667, "M");
- insert into stud_member values(23, "Jinal", "Ashish", "Gandhi", 2, 1 , 323232, "M");
- insert into stud_member values(22, "Ganesh", "Asha", "Patel", 2, 3 , 124244, "M");
- insert into stud_member values(4, "Shweta", "Mihir", "Patel", 3, 1 , 646341, "F");
- insert into stud_member values(7, "Pooja", "Mayaank", "Desai", 3, 3 , 328656, "F");

- insert into stud_member values(8, "Komal", "Krishnaraj", "Bhatia", 2, 3 , 257422, "F");
- insert into stud_member values(43, "Kiran", "Viraj", "Shah", 1, 1 , 754124, "F");
- select * from stud_member;

EXERCISE:-

a) Display the names and contact numbers of all student members.

```
mysql> select FName, MName, SName, ContactNo from stud_member;
```

FName	MName	SName	ContactNo
Ankur	Samir	Kahar	272121
Dhaval	Dhiren	Joshi	232122
Ankita	Biren	Shah	112121
Komal	MaheshKumar	Pandya	123123
Amit	JitenKumar	Mehta	453667
Jinal	Ashish	Gandhi	323232
Ganesh	Asha	Patel	124244
Shweta	Mihir	Patel	646341
Pooja	Mayaank	Desai	328656
Komal	Krishnaraj	Bhatia	257422
Kiran	Viraj	Shah	754124

```
11 rows in set (0.00 sec)
```

b) Give the names and roll number of all students of Information Technology who are the members

```
mysql> select FName, MName, SName, RollNo from stud_member a natural join department b where b.DeptName = 'Information Technology';
```

FName	MName	SName	RollNo
Ankur	Samir	Kahar	1
Dhaval	Dhiren	Joshi	2
Ankita	Biren	Shah	3
Kiran	Viraj	Shah	43

```
4 rows in set (0.00 sec)
```

c) Display names of Departments whose students are members.

```
mysql> select b.DeptID,b.DeptName from stud_member a natural join department b group by DeptName;
```

DeptID	DeptName
1	Information Technology
2	Electrical
3	Civil

```
3 rows in set (0.05 sec)
```

d) Display names of Departments for which no student are members.

```
mysql> select * from department where department.DeptID NOT IN (select DeptID from stud_member);
+-----+-----+
| DeptID | DeptName |
+-----+-----+
|      4 | Mechanical |
|      5 | Chemical |
+-----+-----+
2 rows in set (0.08 sec)
```

e) Display names of all Departments.

```
mysql> select DeptName from department;
+-----+
| DeptName |
+-----+
| Information Technology |
| Electrical |
| Civil |
| Mechanical |
| Chemical |
+-----+
5 rows in set (0.00 sec)
```

f) Find the number of students in the Electrical Department who are members.

```
mysql> select count(*) from stud_member a natural join department b where b.DeptName = 'Electrical';
+-----+
| count(*) |
+-----+
|      4 |
+-----+
1 row in set (0.03 sec)
```

g) Display information of student members whose name begins with the letter 'A'.

```
mysql> select * from stud_member where FName like 'A%';
+-----+-----+-----+-----+-----+-----+-----+-----+
| RollNO | FName | MName | SName | DeptID | Semester | ContactNo | Gender |
+-----+-----+-----+-----+-----+-----+-----+-----+
|      1 | Ankur | Samir | Kahar |      1 |      1 |    272121 | M |
|      3 | Ankita | Biren | Shah |      1 |      1 |    112121 | F |
|     13 | Amit | JitenKumar | Mehta |      3 |      3 |    453667 | M |
+-----+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

h) Display all details of Male members only.

```
mysql> select * from stud_member where Gender = 'M';
```

RollNO	FName	MName	SName	DeptID	Semester	ContactNo	Gender
1	Ankur	Samir	Kahar	1	1	272121	M
2	Dhaval	Dhiren	Joshi	1	1	232122	M
13	Amit	JitenKumar	Mehta	3	3	453667	M
23	Jinal	Ashish	Gandhi	2	1	323232	M
22	Ganesh	Asha	Patel	2	3	124244	M

```
5 rows in set (0.00 sec)
```

i) Display data of student members who are currently in semester 3.

```
mysql> select * from stud_member where Semester = 3;
```

RollNO	FName	MName	SName	DeptID	Semester	ContactNo	Gender
10	Komal	MaheshKumar	Pandya	2	3	123123	F
13	Amit	JitenKumar	Mehta	3	3	453667	M
22	Ganesh	Asha	Patel	2	3	124244	M
7	Pooja	Mayaank	Desai	3	3	328656	F
8	Komal	Krishnaraj	Bhatia	2	3	257422	F

```
5 rows in set (0.00 sec)
```

j) Display data of student female members in alphabetical order.

```
mysql> select * from stud_member where Gender = 'F' order by FName;
```

RollNO	FName	MName	SName	DeptID	Semester	ContactNo	Gender
3	Ankita	Biren	Shah	1	1	112121	F
43	Kiran	Viraj	Shah	1	1	754124	F
10	Komal	MaheshKumar	Pandya	2	3	123123	F
8	Komal	Krishnaraj	Bhatia	2	3	257422	F
7	Pooja	Mayaank	Desai	3	3	328656	F
4	Shweta	Mihir	Patel	3	1	646341	F

```
6 rows in set (0.04 sec)
```