



DBMS LAB-3

Screenshots



JANUARY 31, 2022

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CS20B1075

Q1.

	Field	Type	Null	Key	Default	Extra
►	RollNo	char(8)	NO	PRI	NULL	
	SName	varchar(20)	YES		NULL	
	Gender	char(1)	YES		NULL	
	City	varchar(20)	YES		NULL	

	Field	Type	Null	Key	Default	Extra
►	CCode	char(5)	NO	PRI	NULL	
	CName	varchar(20)	YES		NULL	
	Credit	smallint	YES		NULL	

	Field	Type	Null	Key	Default	Extra
►	RollNo	char(8)	YES	MUL	NULL	
	CCode	char(5)	YES	MUL	NULL	
	YoE	int	YES		NULL	

A. In the Course table add a column course type (CType varchar(20)). This CType will take a value from Core, Elective, or Open Elective. In the Student table add a column Email of varchar(30). This column should be unique and only one email value is to be inserted. Insert email values in “username@domain-name” format.

```
mysql> select * from student;
```

RollNo	SName	Gender	City	Email
1901CS01	abc	M	Hyderabad	abc@gmail.com
1901CS02	abcd	M	Hyderabad	abcd@gmail.com
1901CS03	aa	M	Hyderabad	aa@gmail.com
1901CS04	ac	F	Chennai	ac@gmail.com
1901CS99	abccc	M	Delhi	abccc@yahoo.com
1901EC01	bb	F	Chennai	bb@yahoo.com
1901EC02	aaa	F	Delhi	aaa@yahoo.com
1901EC03	abbb	F	Delhi	abbb@gmail.com
1901ME01	ab	F	Delhi	ab@gmail.com

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

```
mysql> select* from enrolled;
```

RollNo	CCode	YoE
1901EC01	CS100	2019
1901EC01	EC101	2018
1901EC01	EC500	2020
1901EC01	EC201	2019
1901EC01	CS101	2019
1901CS02	CS502	2017
1901CS02	CS502	2020
1901CS03	CS100	2019
1901CS03	CS101	2020
1901CS03	CS501	2020
1901ME01	CS100	2020
1901CS03	CS101	2020
1901CS03	ME101	2020
1901CS03	CS201	2020
1901CS03	EC101	2020
1901CS99	CS100	2019
1901CS99	CS101	2020
1901CS99	CS501	2020
1901CS01	CS100	2019
1901CS01	CS101	2020
1901CS01	CS501	2020
1901EC02	CS100	2020
1901EC02	CS101	2020
1901EC02	ME101	2020
1901EC02	CS201	2020
1901EC03	CS100	2020

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

```
mysql> select * from course
-> ;
```

CCode	CName	Credit	CType
CS100	PSP	4	Core
CS101	DSCS	2	Core
CS201	DBMS	4	Open Elective
CS501	OS	3	Elective
CS502	CD	4	Elective
EC101	DSD	4	Core
EC201	ET	4	Elective
EC500	IOT	4	Open Elective
ME101	MSE	4	Core

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

B. Find the name of all the courses which start with “CS”code.

```
mysql> select * from course where CCode like "CS%";
```

CCode	CName	Credit	CType
CS100	PSP	4	Core
CS101	DSCS	2	Core
CS201	DBMS	4	Open Elective
CS501	OS	3	Elective
CS502	CD	4	Elective

```
5 rows in set (0.01 sec)
```

C. Find the name of the male students who have at least two “a”s in their names.

```
mysql> Select * from student where Gender="M" AND SName LIKE "%a%a%";
```

RollNo	SName	Gender	City	Email
1901CS03	aa	M	Hyderabad	aa@gmail.com

```
1 row in set (0.00 sec)
```

D. Find the students who have not enrolled in between 2018 and 2019.

```
mysql> SELECT * FROM Enrolled WHERE NOT YoE=2018;
```

RollNo	CCode	YoE
1901CS01	CS100	2019
1901CS01	CS101	2020
1901CS01	CS501	2020
1901EC01	CS100	2019
1901EC01	EC500	2020
1901EC01	EC201	2019
1901EC01	CS101	2019
1901CS02	CS502	2017
1901CS02	CS502	2020
1901CS03	CS100	2019
1901CS03	CS101	2020
1901CS03	CS501	2020
1901ME01	CS100	2020
1901CS03	CS101	2020
1901CS03	ME101	2020
1901CS03	CS201	2020
1901CS03	EC101	2020

```
17 rows in set (0.01 sec)
```

```
mysql> SELECT * FROM Enrolled WHERE NOT YoE=2018 AND NOT YoE=2019;
```

RollNo	CCode	YoE
1901CS01	CS101	2020
1901CS01	CS501	2020
1901EC01	EC500	2020
1901CS02	CS502	2017
1901CS02	CS502	2020
1901CS03	CS101	2020
1901CS03	CS501	2020
1901ME01	CS100	2020
1901CS03	CS101	2020
1901CS03	ME101	2020
1901CS03	CS201	2020
1901CS03	EC101	2020

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

E. Find the course with least credit.

```
mysql> SELECT CName, min(Credit) FROM Course;
```

CName	min(Credit)
PSP	2

```
1 row in set (0.00 sec)
```


- F. Find the name of the Course which is not enrolled by any students in the year 2020.

```
mysql> select CName from Course where not CCode in (select CCode from enrolled where YoE=2020);
+-----+
| CName |
+-----+
| ET    |
+-----+
1 row in set (0.00 sec)
```

- G. Find the total number of students city wise.

```
mysql> select city, count(SName) from student group by city;
+-----+-----+
| city    | count(SName) |
+-----+-----+
| Hyderabad | 3 |
| Chennai  | 2 |
| Delhi    | 4 |
+-----+-----+
3 rows in set (0.00 sec)
```

- H. Find the rollno of the students who have enrolled to 5 number of courses.

```
mysql> select RollNo, count(CCode) from Enrolled group by RollNo order by count(CCode) DESC;
+-----+-----+
| RollNo | count(CCode) |
+-----+-----+
| 1901CS03 | 7 |
| 1901EC01 | 5 |
| 1901EC02 | 4 |
| 1901CS01 | 3 |
| 1901CS99 | 3 |
| 1901CS02 | 2 |
| 1901EC03 | 1 |
| 1901ME01 | 1 |
+-----+-----+
8 rows in set (0.00 sec)

mysql> select RollNo, count(CCode)=5 from Enrolled group by RollNo order by count(CCode)=5 DESC LIMIT 1;
+-----+-----+
| RollNo | count(CCode)=5 |
+-----+-----+
| 1901EC01 | 1 |
+-----+-----+
1 row in set (0.00 sec)
```

- I. Find the total number of courses enrolled by student with roll no "1901CS99".

```
mysql> select RollNo,count(CCode) from Enrolled where RollNo="1901CS99";
+-----+-----+
| RollNo | count(CCode) |
+-----+-----+
| 1901CS99 | 3 |
+-----+-----+
1 row in set (0.00 sec)
```

- J. Find all the 5 level courses (the digits parts of the course code should start with 5).

```
mysql> SELECT * from Course where CCode like '__5__';
+-----+-----+-----+-----+
| CCode | CName | Credit | CType |
+-----+-----+-----+-----+
| CS501 | OS | 3 | Elective |
| CS502 | CD | 4 | Elective |
| EC500 | IOT | 4 | Open Elective |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

- K. Count the number of students containing “CS” as part of the RollNo.

```
mysql> select *from Student where RollNo like '%CS%';
+-----+-----+-----+-----+-----+
| RollNo | SName | Gender | City | Email |
+-----+-----+-----+-----+-----+
| 1901CS01 | abc | M | Hyderabad | abc@gmail.com |
| 1901CS02 | abcd | M | Hyderabad | abcd@gmail.com |
| 1901CS03 | aa | M | Hyderabad | aa@gmail.com |
| 1901CS04 | ac | F | Chennai | ac@gmail.com |
| 1901CS99 | abccc | M | Delhi | abccc@yahoo.com |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select count(RollNo) from Student where RollNo like '%CS%';
+-----+
| count(RollNo) |
+-----+
| 5 |
+-----+
1 row in set (0.01 sec)
```

- L. Find the roll no of students who have enrolled in more than 4 courses in the year 2020.


```
mysql> select count(CCode)>4,RollNo from Enrolled where YoE=2020;
```

count(CCode)>4	RollNo
1	1901EC01

```
1 row in set (0.00 sec)
```

M. Find the course code which is taken by most number of female students who are from Delhi city.

```
mysql> select *,count(CCode) from Enrolled,student where Gender='F' and City = 'Delhi'and Enrolled.RollNo=student.RollNo GROUP BY CCode ORDER BY count(CCode) DESC LIMIT 1;
```

RollNo	CCode	YoE	RollNo	SName	Gender	City	Email	count(CCode)
1901EC02	CS100	2020	1901EC02	aaa	F	Delhi	aaa@yahoo.com	3

```
1 row in set (0.00 sec)
```

N. Find the name of all the students whose email ids have “gmail.com” or “yahoo.com” as the domain name.

```
mysql> select * from student where email like "%gmail.com" or email like "%yahoo.com";
```

RollNo	SName	Gender	City	Email
1901CS01	abc	M	Hyderabad	abc@gmail.com
1901CS02	abcd	M	Hyderabad	abcd@gmail.com
1901CS03	aa	M	Hyderabad	aa@gmail.com
1901CS04	ac	F	Chennai	ac@gmail.com
1901CS99	abccc	M	Delhi	abccc@yahoo.com
1901EC01	bb	F	Chennai	bb@yahoo.com
1901EC02	aaa	F	Delhi	aaa@yahoo.com
1901EC03	abbb	F	Delhi	abbb@gmail.com
1901ME01	ab	F	Delhi	ab@gmail.com

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