

# LAB-02

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**Q1->**

a)

```
mysql> create table Customer(  
-> Cust_ID varchar(5) UNIQUE,  
-> name varchar(30),  
-> city varchar(15),  
-> state varchar(15),  
-> pincode int,  
-> products varchar(40),  
-> price int);  
Query OK, 0 rows affected (0.01 sec)
```

```
[mysql> select * from Customer;
```

Cust_ID	name	city	state	pincode	products	price
C101	Alex William	Indore	Madhya Pradesh	452013	chair	4000
C102	Alex William	Pune	Maharastra	652016	table	8000
C103	V. Iyer	Chennai	Tamil Nadu	752716	table	8001
C104	L. Laxmi	Chennai	Tamil Nadu	752717	doll	200
C105	Ravi Teja	Hyderabad	Telangana	252727	doll	250
C106	Raj Kumar	Delhi	Delhi	151127	cricket kit	5250
C107	Tuner Bond	Bhopal	Madhya Pradesh	451127	football kit	3250
C108	Nikhil Yadav	Chennai	Tamil Nadu	751127	football kit	6250
C109	John	Mumbai	Maharastra	651127	football kit	6255

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

b)

1. Find out name of all customers(without duplicates)

```
[mysql> select distinct name from Customer;
```

name
Alex William
V. Iyer
L. Laxmi
Ravi Teja
Raj Kumar
Tuner Bond
Nikhil Yadav
John

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

## 2. Retrieve the list of names and cities of all the customers.

```
[mysql> select name, city from Customer;
+-----+-----+
| name      | city      |
+-----+-----+
| Alex William | Indore    |
| Alex William | Pune      |
| V. Iyer      | Chennai   |
| L. Laxmi     | Chennai   |
| Ravi Teja    | Hyderabad |
| Raj Kumar    | Delhi     |
| Tuner Bond    | Bhopal    |
| Nikhil Yadav | Chennai   |
| John         | Mumbai    |
+-----+-----+
9 rows in set (0.00 sec)
```

## 3. List the available products whose name begins with 'D'.

```
[mysql> select products from Customer where products like '%D%';
+-----+
| products |
+-----+
| doll      |
| doll      |
+-----+
2 rows in set (0.00 sec)
```

## 4. List all the clients who are in Chennai

```
[mysql> select Cust_ID, name from Customer where city like '%Chennai%';
+-----+-----+
| Cust_ID | name      |
+-----+-----+
| C103    | V. Iyer   |
| C104    | L. Laxmi  |
| C108    | Nikhil Yadav |
+-----+-----+
3 rows in set (0.00 sec)
```

**5. Display the information for clients with ID C108 and C104.**

```
[mysql> select * from Customer where Cust_ID='C104' or Cust_ID='C108';
```

Cust_ID	name	city	state	pincode	products	price
C104	L. Laxmi	Chennai	Tamil Nadu	752717	doll	200
C108	Nikhil Yadav	Chennai	Tamil Nadu	751127	football kit	6250

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

**6. Find all the products whose sell price is grater than 5000.**

```
[mysql> select products from Customer where price>5000;
```

products
table
table
cricket kit
football kit
football kit

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

**7. Find the list of all customer IDs who stay in city 'Hyderabad' or city 'Pune' or 'Delhi'**

```
[mysql> select Cust_ID from Customer where city='Hyderabad' or city='pune' or city='Delhi';
```

Cust_ID
C102
C105
C106

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

8. List the product whose selling price is greater than 2000 and less than or equal to 5000.

```
[mysql> select products from Customer where price>2000 && price<=5000;
+-----+
| products |
+-----+
| chair    |
| football kit |
+-----+
2 rows in set, 1 warning (0.01 sec)
```

9. List the name, city and state of clients not in the state of 'Tamil Nadu'.

```
[mysql> select name, city, state from Customer where state!='Tamil Nadu';
+-----+-----+-----+
| name      | city      | state      |
+-----+-----+-----+
| Alex William | Indore    | Madhya Pradesh |
| Alex William | Pune      | Maharashtra     |
| Ravi Teja    | Hyderabad | Telangana       |
| Raj Kumar    | Delhi     | Delhi           |
| Tuner Bond   | Bhopal    | Madhya Pradesh  |
| John        | Mumbai    | Maharashtra     |
+-----+-----+-----+
6 rows in set (0.01 sec)
```

10. Modify customer name "John" as "Johney".

```
[mysql> update Customer set name = 'Johney' where name = 'John';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

[mysql> select * from Customer;
+-----+-----+-----+-----+-----+-----+-----+
| Cust_ID | name      | city      | state      | pincode | products | price |
+-----+-----+-----+-----+-----+-----+-----+
| C101    | Alex William | Indore    | Madhya Pradesh | 452013 | chair    | 4000 |
| C102    | Alex William | Pune      | Maharashtra     | 652016 | table    | 8000 |
| C103    | V. Iyer      | Chennai   | Tamil Nadu      | 752716 | table    | 8001 |
| C104    | L. Laxmi     | Chennai   | Tamil Nadu      | 752717 | doll     | 200  |
| C105    | Ravi Teja    | Hyderabad | Telangana       | 252727 | doll     | 250  |
| C106    | Raj Kumar    | Delhi     | Delhi           | 151127 | cricket kit | 5250 |
| C107    | Tuner Bond   | Bhopal    | Madhya Pradesh  | 451127 | football kit | 3250 |
| C108    | Nikhil Yadav | Chennai   | Tamil Nadu      | 751127 | football kit | 6250 |
| C109    | Johney       | Mumbai    | Maharashtra     | 651127 | football kit | 6255 |
+-----+-----+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```



## Q2->

### 1. Create the following table into database 'business'

```
[mysql> create database business;
Query OK, 1 row affected (0.01 sec)

[mysql> use business;
Database changed
mysql> create table employee(
    -> emp_no int,
    -> emp_name varchar(30),
    -> doj Date,
    -> ph_no bigint,
    -> dept_name varchar(30),
    -> designation varchar(30),
    -> salary int
    -> );
Query OK, 0 rows affected (0.04 sec)
```

### 2. Insert data into table.

```
[mysql> select * from employee;
```

emp_no	emp_name	doj	ph_no	dept_name	designation	salary
1234	Sarala	2020-01-02	9444123456	Sales	HR	70000
3452	Amogh	2019-01-01	9464123456	Sales	Sales manager	72000
4312	Qasim	2019-04-01	9444123423	Sales	Sales representative	7000
4112	Swathi	2019-04-23	NULL	Sales	Typist	3300
6693	Manoj	2019-03-01	9444125357	HR	Marketing	17000
4345	Devi kumar	2020-01-01	9448563456	HR	HR	70000
5744	Hari dev	2019-03-01	9464893456	Marketing	Receptionist	2000
7899	William Jane	2019-04-12	NULL	Marketing	Typist	4000
3451	Dennis	2019-11-01	8244125357	Marketing	sales representative	7000
2399	Govind	2019-03-01	8346123423	Accounts	Typist	4500
4599	Dhanad	2019-04-02	8456123423	Accounts	Typist	4000
2399	Khurana	2019-03-01	9448903423	Accounts	CA	14500
4599	Suraj	2019-04-02	9426123423	Accounts	CA	46000

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

3. Add 3 to 5 rows in the employee following the given conditions.

And

4. Display all records.

```
mysql> insert into employee values(4600,'John','2019-05-2',9426123323,'Sales','Sales Manager',45000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values(4601,'Nikhil','2019-04-3',9423123423,'HR','HR',47000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values(4602,'Raj','2019-04-4',9426113423,'Accounts','CA',42000);
Query OK, 1 row affected (0.00 sec)

mysql> select * from employee;
```

emp_no	emp_name	doj	ph_no	dept_name	designation	salary
1234	Sarala	2020-01-02	9444123456	Sales	HR	70000
3452	Amogh	2019-01-01	9464123456	Sales	Sales manager	72000
4312	Qasim	2019-04-01	9444123423	Sales	Sales representative	7000
4112	Swathi	2019-04-23	NULL	Sales	Typist	3300
6693	Manoj	2019-03-01	9444125357	HR	Marketing	17000
4345	Devi kumar	2020-01-01	9448563456	HR	HR	70000
5744	Hari dev	2019-03-01	9464893456	Marketing	Receptionist	2000
7899	William Jane	2019-04-12	NULL	Marketing	Typist	4000
3451	Dennis	2019-11-01	8244125357	Marketing	sales representative	7000
2399	Govind	2019-03-01	8346123423	Accounts	Typist	4500
4599	Dhanad	2019-04-02	8456123423	Accounts	Typist	4000
2399	Khurana	2019-03-01	9448903423	Accounts	CA	14500
4599	Suraj	2019-04-02	9426123423	Accounts	CA	46000
4600	John	2019-05-02	9426123323	Sales	Sales Manager	45000
4601	Nikhil	2019-04-03	9423123423	HR	HR	47000
4602	Raj	2019-04-04	9426113423	Accounts	CA	42000

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

5. Display the empno and name of all the employees from department name ending with 's';

```
mysql> select emp_no, emp_name from employee where dept_name like '%s';
```

emp_no	emp_name
1234	Sarala
3452	Amogh
4312	Qasim
4112	Swathi
2399	Govind
4599	Dhanad
2399	Khurana
4599	Suraj
4600	John
4602	Raj

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

**6. Display the empno and name of all employees whose salary is between 2000 and 5000.**

```
[mysql> select emp_no, emp_name from employee where salary>2000 && salary<5000;
+-----+-----+
| emp_no | emp_name |
+-----+-----+
| 4112   | Swathi   |
| 7899   | William Jane |
| 2399   | Govind   |
| 4599   | Dhanad   |
+-----+-----+
4 rows in set, 1 warning (0.00 sec)
```

**7. Display all designations starting with 'sales'**

```
[mysql> select designation from employee where designation like 'sales%';
+-----+
| designation |
+-----+
| Sales manager |
| Sales representative |
| sales representative |
| Sales Manager |
+-----+
4 rows in set (0.00 sec)

[mysql> select distinct designation from employee where designation like 'sales%';
+-----+
| designation |
+-----+
| Sales manager |
| Sales representative |
+-----+
2 rows in set (0.00 sec)
```



## 8. Change the salary of employees to 25000 whose designation is 'Typist'

```
[mysql> update employee set salary=25000 where designation='typist';
Query OK, 4 rows affected (0.00 sec)
Rows matched: 4  Changed: 4  Warnings: 0

[mysql> select * from employee;
```

emp_no	emp_name	doj	ph_no	dept_name	designation	salary
1234	Sarala	2020-01-02	9444123456	Sales	HR	70000
3452	Amogh	2019-01-01	9464123456	Sales	Sales manager	72000
4312	Qasim	2019-04-01	9444123423	Sales	Sales representative	7000
4112	Swathi	2019-04-23	NULL	Sales	Typist	25000
6693	Manoj	2019-03-01	9444125357	HR	Marketing	17000
4345	Devi kumar	2020-01-01	9448563456	HR	HR	70000
5744	Hari dev	2019-03-01	9464893456	Marketing	Receptionist	2000
7899	William Jane	2019-04-12	NULL	Marketing	Typist	25000
3451	Dennis	2019-11-01	8244125357	Marketing	sales representative	7000
2399	Govind	2019-03-01	8346123423	Accounts	Typist	25000
4599	Dhanad	2019-04-02	8456123423	Accounts	Typist	25000
2399	Khurana	2019-03-01	9448903423	Accounts	CA	14500
4599	Suraj	2019-04-02	9426123423	Accounts	CA	46000
4600	John	2019-05-02	9426123323	Sales	Sales Manager	45000
4601	Nikhil	2019-04-03	9423123423	HR	HR	47000
4602	Raj	2019-04-04	9426113423	Accounts	CA	42000

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

## 9. Change the mobile number of employee named 'John'

```
[mysql> update employee set ph_no=8088232234 where emp_name='John';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

[mysql> select emp_name, ph_no from employee;
```

emp_name	ph_no
Sarala	9444123456
Amogh	9464123456
Qasim	9444123423
Swathi	NULL
Manoj	9444125357
Devi kumar	9448563456
Hari dev	9464893456
William Jane	NULL
Dennis	8244125357
Govind	8346123423
Dhanad	8456123423
Khurana	9448903423
Suraj	9426123423
John	8088232234
Nikhil	9423123423
Raj	9426113423

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



## 10. Give all the receptionists 10% hike.

```
[mysql> update employee set salary=salary + 0.1*salary where designation='receptionist';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0

[mysql> select * from employee;
```

emp_no	emp_name	doj	ph_no	dept_name	designation	salary
1234	Sarala	2020-01-02	9444123456	Sales	HR	70000
3452	Amogh	2019-01-01	9464123456	Sales	Sales manager	72000
4312	Qasim	2019-04-01	9444123423	Sales	Sales representative	7000
4112	Swathi	2019-04-23	NULL	Sales	Typist	25000
6693	Manoj	2019-03-01	9444125357	HR	Marketing	17000
4345	Devi kumar	2020-01-01	9448563456	HR	HR	70000
5744	Hari dev	2019-03-01	9464893456	Marketing	Receptionist	2200
7899	William Jane	2019-04-12	NULL	Marketing	Typist	25000
3451	Dennis	2019-11-01	8244125357	Marketing	sales representative	7000
2399	Govind	2019-03-01	8346123423	Accounts	Typist	25000
4599	Dhanad	2019-04-02	8456123423	Accounts	Typist	25000
2399	Khurana	2019-03-01	9448903423	Accounts	CA	14500
4599	Suraj	2019-04-02	9426123423	Accounts	CA	46000
4600	John	2019-05-02	8088232234	Sales	Sales Manager	45000
4601	Nikhil	2019-04-03	9423123423	HR	HR	47000
4602	Raj	2019-04-04	9426113423	Accounts	CA	42000

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

## 11. Find the employees whose mobile number is not mentioned.

```
[mysql> select emp_no, emp_name from employee where ph_no IS NULL;
```

emp_no	emp_name
4112	Swathi
7899	William Jane

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

## 12. Delete all employees whose salaries are greater than Rs. 7000

```
[mysql> delete from employee where salary>7000;
Query OK, 13 rows affected (0.00 sec)

[mysql> select * from employee;
```

emp_no	emp_name	doj	ph_no	dept_name	designation	salary
4312	Qasim	2019-04-01	9444123423	Sales	Sales representative	7000
5744	Hari dev	2019-03-01	9464893456	Marketing	Receptionist	2200
3451	Dennis	2019-11-01	8244125357	Marketing	sales representative	7000

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

### 13. Truncate the table

```
[mysql> truncate employee;  
Query OK, 0 rows affected (0.02 sec)  
  
[mysql> select * from employee;  
Empty set (0.00 sec)
```

### 14. Display the table structure

```
[mysql> desc employee;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| emp_no     | int           | YES  |     | NULL    |       |  
| emp_name   | varchar(30)   | YES  |     | NULL    |       |  
| doj        | date          | YES  |     | NULL    |       |  
| ph_no      | bigint        | YES  |     | NULL    |       |  
| dept_name  | varchar(30)   | YES  |     | NULL    |       |  
| designation | varchar(30)   | YES  |     | NULL    |       |  
| salary     | int           | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
7 rows in set (0.00 sec)
```