BASIC SQL COMMAND

Lab 1

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Write SQL queries for following question:

Customer (Cust id : integer, cust_name: string)

```
[mysql> create table Customer(cust_id int(10), cust_name varchar(20));
Query OK, 0 rows affected, 1 warning (0.01 sec)
```

Item (item_id: integer, item_name: string, price: integer)
For the above schema, perform the following

```
[mysql> create table Item(item_id int(10), item_name varchar(20), price int);
Query OK, 0 rows affected, 1 warning (0.00 sec)
```

a) Create the tables and insert five records in
each table
Inserting in Customer

```
[mysql> insert into Customer values (2, "Ishita");
Query OK, 1 row affected (0.01 sec)
```

```
[mysql> select * from Customer;
+---------+-----------+
| cust_id | cust_name |
+---------+-----------+
|       2 | Ishita    |
|       4 | Veena     |
|       6 | Sheela    |
|       8 | Gita      |
|      10 | Mita      |
+---------+-----------+
5 rows in set (0.01 sec)
```

Inserting in Item

```
[mysql> insert into Item values(1, "Dal", 200);
Query OK, 1 row affected (0.00 sec)
```

```
[mysql> select * from Item;
+---------+-----------+-------+
| item_id | item_name | price |
+---------+-----------+-------+
|       1 | Dal       |   200 |
|       2 | Rice      |   120 |
|       3 | Bread     |    80 |
|       4 | Ghee      |  1000 |
|       5 | Egg       |   150 |
+---------+-----------+-------+
5 rows in set (0.00 sec)
```

b) Display the schema of each table

```
[mysql> describe Customer;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| cust_id   | int         | YES  |     | NULL    |       |
| cust_name | varchar(20) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
2 rows in set (0.01 sec)
```

```
[mysql> describe Item;
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| item_id   | int         | YES  |     | NULL    |       |
| item_name | varchar(20) | YES  |     | NULL    |       |
| price     | int         | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

c) Change the data type of price from integer to number

```
[mysql> alter table Item
[    -> modify column price float;
Query OK, 5 rows affected (0.02 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

d) Change the name of column/field item name to I_name

```
[mysql> alter table Item
[    -> rename column item_name to I_name;
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Displaying schema after performing queries c) and d)

```
[mysql> describe Item;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| item_id | int         | YES  |     | NULL    |       |
| I_name  | varchar(20) | YES  |     | NULL    |       |
| price   | float       | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

e) Delete the record of customer having cust _id -6

```
[mysql> delete from Customer where cust_id = 6;
 Query OK, 1 row affected (0.00 sec)

[mysql> select * from customer;
+---------+-----------+
| cust_id | cust_name |
+---------+-----------+
|       2 | Ishita    |
|       4 | Veena     |
|       8 | Gita      |
|      10 | Mita      |
+---------+-----------+
4 rows in set (0.00 sec)
```

f) Add a column age in table Customer

```
[mysql> alter table Customer add column age int;
 Query OK, 0 rows affected (0.01 sec)
 Records: 0  Duplicates: 0  Warnings: 0

[mysql> select * from Customer;
+---------+-----------+------+
| cust_id | cust_name | age  |
+---------+-----------+------+
|       2 | Ishita    | NULL |
|       4 | Veena     | NULL |
|       8 | Gita      | NULL |
|      10 | Mita      | NULL |
+---------+-----------+------+
4 rows in set (0.00 sec)
```

g) Rename the attribute price in table Item to Cost_price

```
[mysql> alter table Item rename column price to cost_price;
 Query OK, 0 rows affected (0.01 sec)
 Records: 0  Duplicates: 0  Warnings: 0

[mysql> describe Item;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| item_id    | int         | YES  |     | NULL    |       |
| I_name     | varchar(20) | YES  |     | NULL    |       |
| cost_price | float       | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

h) Add an attribute in table Item
Adding attribute 'quantity' of type 'int'

```
[mysql> alter table Item add column quantity int;
Query OK, 0 rows affected (0.00 sec)
Records: 0  Duplicates: 0  Warnings: 0

[mysql> describe Item;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| item_id    | int         | YES  |     | NULL    |       |
| I_name     | varchar(20) | YES  |     | NULL    |       |
| cost_price | float       | YES  |     | NULL    |       |
| quantity   | int         | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)
```

i) Update the price of Item id -4 from 1000 to 2000

```
[mysql> update Item set cost_price = 2000 where item_id = 4;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

[mysql> select * from Item where item_id = 4;
+---------+--------+------------+----------+
| item_id | I_name | cost_price | quantity |
+---------+--------+------------+----------+
|       4 | Ghee   |       2000 |     NULL |
+---------+--------+------------+----------+
1 row in set (0.00 sec)
```

j) Update the name of Customer having id-002

```
[mysql> update Customer set cust_name = "Rama" where cust_id = 002;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

[mysql> select * from Customer where cust_id = 002;
+---------+-----------+------+
| cust_id | cust_name | age  |
+---------+-----------+------+
|       2 | Rama      | NULL |
+---------+-----------+------+
1 row in set (0.00 sec)
```

k) Delete the contents of the table Customer

```
[mysql> truncate table Customer;
 Query OK, 0 rows affected (0.02 sec)

[mysql> select * from Customer;
 Empty set (0.00 sec)
```

l) Display table Item in the following way:

i)   Selected rows all columns

```
mysql> select * from Item where item_id = 5 or quantity = 20;
+---------+--------+------------+----------+
| item_id | I_name | cost_price | quantity |
+---------+--------+------------+----------+
|       1 | Dal    |        200 |       20 |
|       2 | Rice   |        120 |       20 |
|       5 | Egg    |        150 |      100 |
+---------+--------+------------+----------+
3 rows in set (0.00 sec)
```

ii)   All rows selected columns

```
[mysql> select I_name, quantity from Item;
+--------+----------+
| I_name | quantity |
+--------+----------+
| Dal    |       20 |
| Rice   |       20 |
| Bread  |       10 |
| Ghee   |       50 |
| Egg    |      100 |
+--------+----------+
5 rows in set (0.00 sec)
```

iii)   All rows all columns

```
[mysql> select * from Item;
+---------+--------+------------+----------+
| item_id | I_name | cost_price | quantity |
+---------+--------+------------+----------+
|       1 | Dal    |        200 |       20 |
|       2 | Rice   |        120 |       20 |
|       3 | Bread  |         80 |       10 |
|       4 | Ghee   |       2000 |       50 |
|       5 | Egg    |        150 |      100 |
+---------+--------+------------+----------+
5 rows in set (0.00 sec)
```

iv)   Selected rows selected columns

```
[mysql> select I_name, quantity from Item where quantity>=50;
+--------+----------+
| I_name | quantity |
+--------+----------+
| Ghee   |       50 |
| Egg    |      100 |
+--------+----------+
2 rows in set (0.00 sec)
```

m) Drop table Customer

```
[mysql> drop table Customer;
Query OK, 0 rows affected (0.01 sec)

[mysql> show tables;
+----------------+
| Tables_in_lab1 |
+----------------+
| Item           |
+----------------+
1 row in set (0.01 sec)
```