# *** SQL PROJECT ***

# Board band Management System

# (Wi-Fi-Company)



BROAD BAND MANAGEMENT SYSTEM

ER DAIGRAM
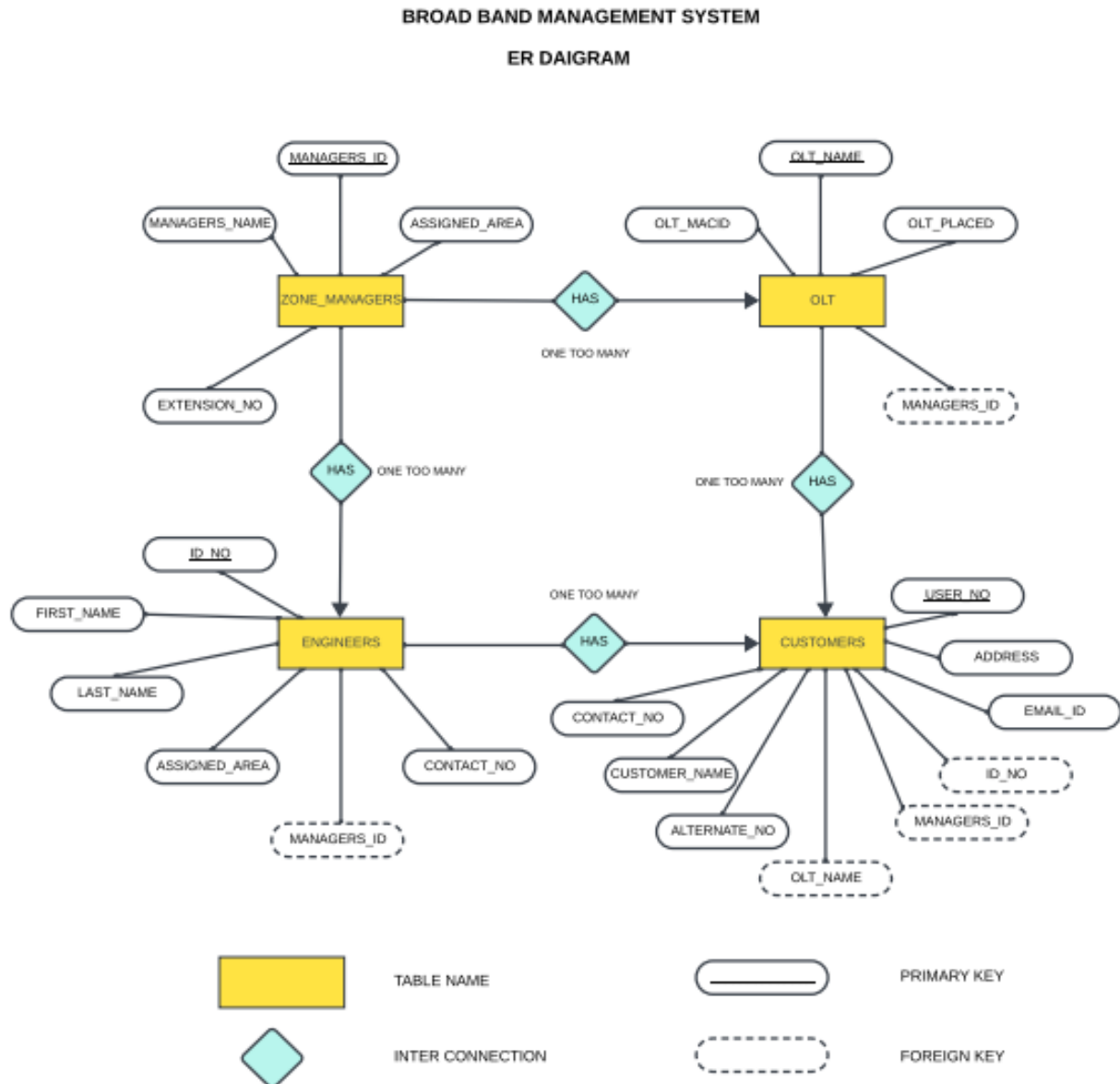
Utilized the PhpMyAdmin platform to execute a comprehensive database project, involving the creation and management of four essential tables

**Zone Managers Table:** Established a structured table to manage zone managers' data efficiently, facilitating organized data handling and retrieval.

**OLT Table:** Developed a dedicated table for Optical Line Terminal (OLT) information, ensuring accurate storage and management of critical data related to network infrastructure.

**Engineers Table:** Implemented a table structure to store essential details of engineers, enabling streamlined

tracking of personnel information and assignments.

**Customers Table:** Established a robust table structure to manage customer data effectively, enabling seamless customer relationship management within the database system.

Performed data manipulation tasks including:

**Data Insertion:** Populated the tables with multiple records, ensuring comprehensive data representation.

**Data Interconnection:** Established relationships between tables using foreign keys, facilitating data integrity and coherence across the database.

**Data Retrieval:** Employed various SQL query techniques to retrieve data based on different conditions, such as fetching single columns, employing aliases, executing subqueries, and applying advanced querying methods like inner joins.

**Data Modification:** Implemented SQL commands for data modification tasks, including updates and deletions, ensuring data accuracy and relevance.

**Data Management:** Employed SQL commands such as order by, truncate, and drop to manage data efficiently within the database environment, ensuring optimal performance and integrity.
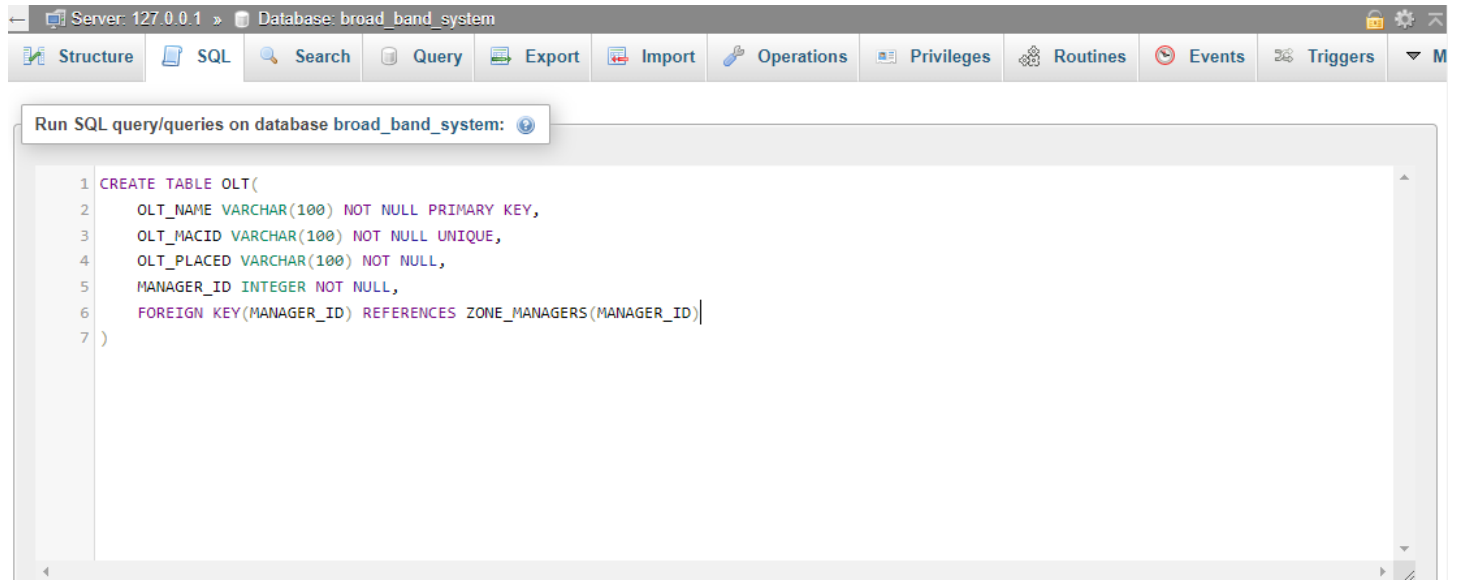
## Created Tables:

**ZONE_MANAGERS :** Create table ZONE_MANAGERS(

MANAGER_ID INTEGER NOT NULL  primary key,

MANAGER_NAME varchar(50) NOT NULL,

ASSIGNED_AREA varchar(50) NOT NULL,

EXTENTION_NO number unique

 );



```
1  CREATE TABLE ZONE_MANAGERS(
2      MANAGER_ID INTEGER NOT NULL PRIMARY KEY,
3      MANAGER_NAME VARCHAR(50) NOT NULL,
4      ASSIGNED_AREA VARCHAR(50) NOT NULL,
5      EXTENSION_NO INTEGER UNIQUE
6  )
```
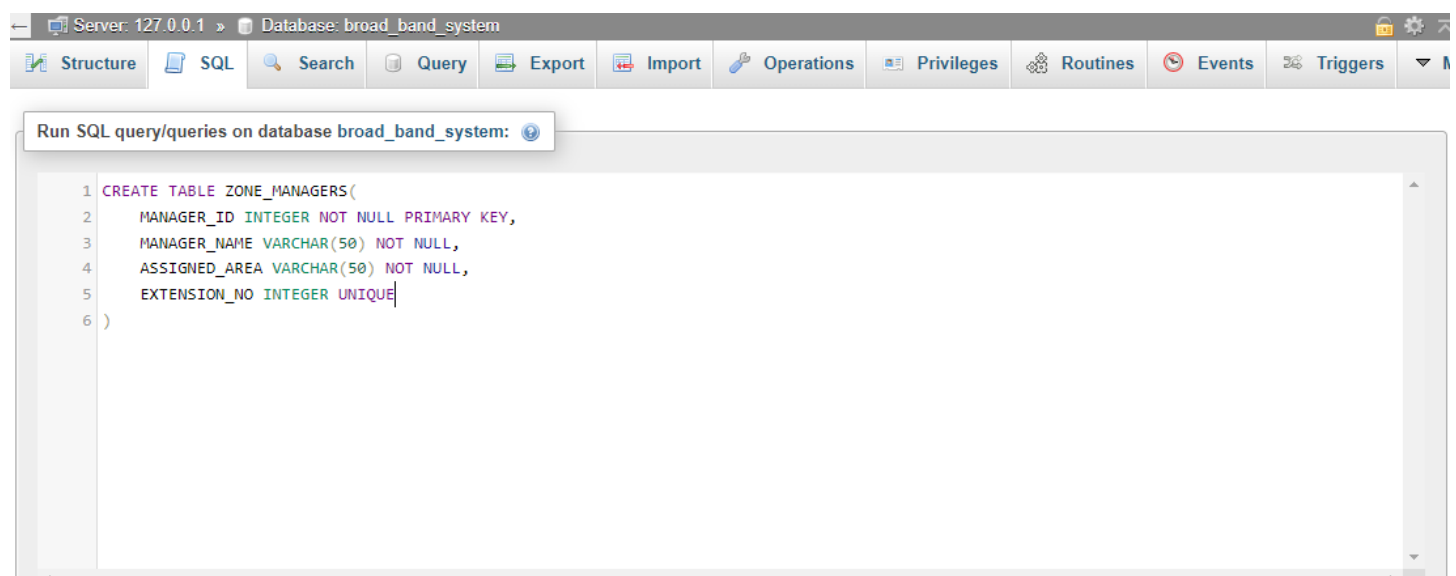
**OLT :** create table OLT( OLT_NAME varchar(100) NOT NULL primary key,

OLT_MACID varchar(100) NOT NULL unique,

OLT_PLACED varchar(100) NOT NULL,

MANAGER_ID INTEGER NOT NULL,

Foreign key(MANAGER_ID) references ZONE_MANAGERS(MANAGER_ID)

);

```
1  CREATE TABLE OLT(
2      OLT_NAME VARCHAR(100) NOT NULL PRIMARY KEY,
3      OLT_MACID VARCHAR(100) NOT NULL UNIQUE,
4      OLT_PLACED VARCHAR(100) NOT NULL,
5      MANAGER_ID INTEGER NOT NULL,
6      FOREIGN KEY(MANAGER_ID) REFERENCES ZONE_MANAGERS(MANAGER_ID)
7  )
```

**ENGINEERS:** Create table ENGINEERS( ID_NO varchar(50) primary key,

FIRST_NAME varchar(50) NOT NULL,
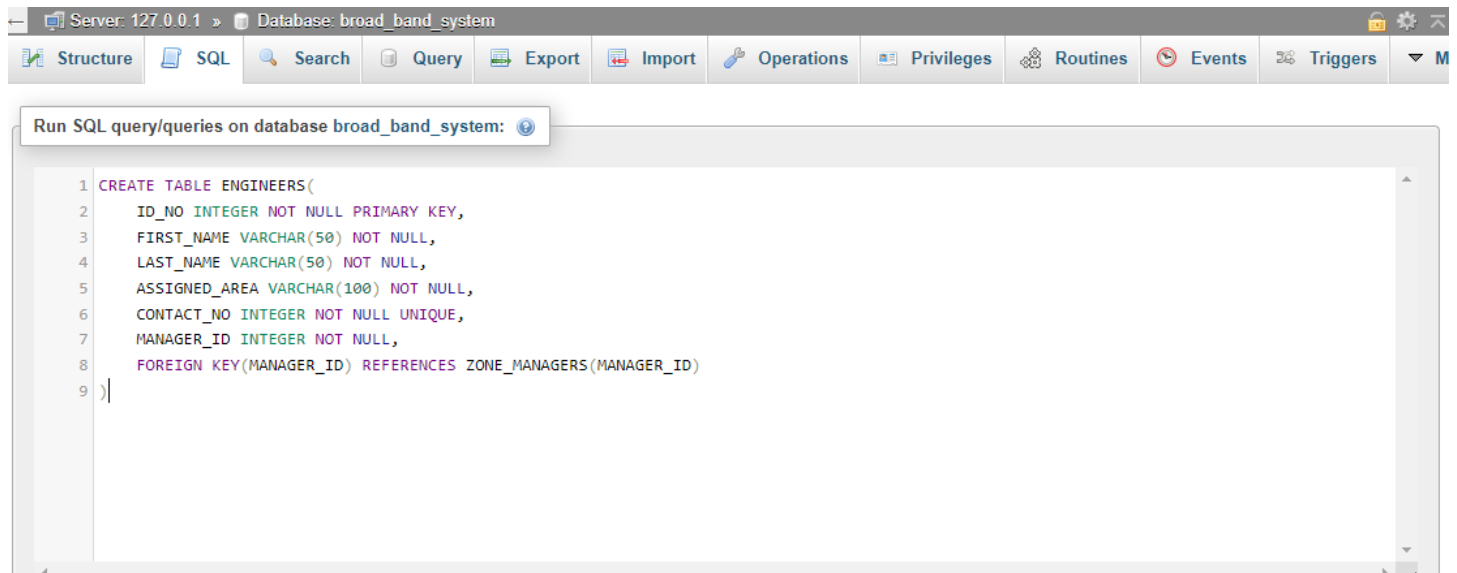
LAST_NAME varchar(50) NOT NULL,

ASSIGNED_AREA varchar(100) NOT NULL,

CONTACT_NO number NOT NULL unique,

MANAGER_ID INTEGER NOT NULL,

Foreign key(MANAGER_ID) references ZONE_MANAGERS(MANAGER_ID)

);

```
1  CREATE TABLE ENGINEERS(
2      ID_NO INTEGER NOT NULL PRIMARY KEY,
3      FIRST_NAME VARCHAR(50) NOT NULL,
4      LAST_NAME VARCHAR(50) NOT NULL,
5      ASSIGNED_AREA VARCHAR(100) NOT NULL,
6      CONTACT_NO INTEGER NOT NULL UNIQUE,
7      MANAGER_ID INTEGER NOT NULL,
8      FOREIGN KEY(MANAGER_ID) REFERENCES ZONE_MANAGERS(MANAGER_ID)
9  )
```

**CUSTOMERS:** Create table CUSTOMERS( USER_ID varchar(100) NOT NULL primary key,
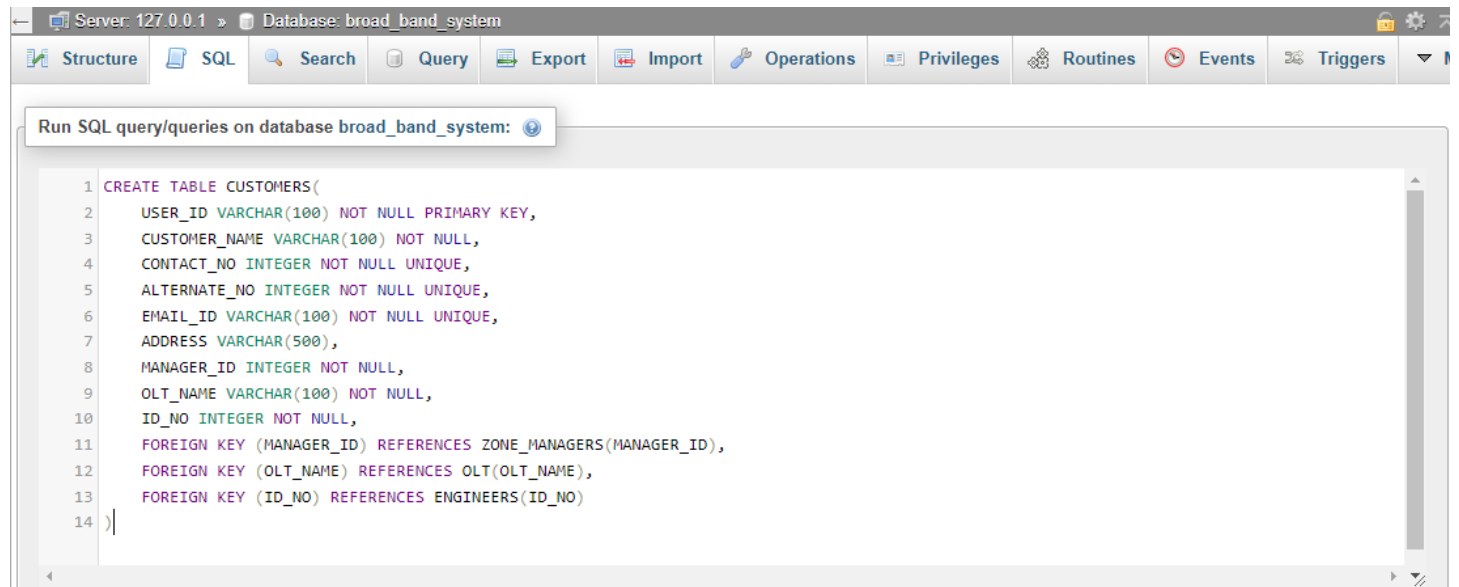
CUSTOMER_NAME varchar(100) NOT NULL,

CONTACT_NO INTEGER NOT NULL,

 ALTERNATE_NO INTEGER unique,

EMAIL_ID varchar(100) NOT NULL unique,

ADDRESS varchar(500),

MANAGER_ID INTEGER NOT NULL,

OLT_NAME varchar(100) NOT NULL,

ID_NO INTEGER NOT NULL,

Foreign key(MANAGER_ID) references ZONE_MANAGERS(MANAGER_ID),

Foreign key(OLT_NAME) references OLT(OLT_NAME),

Foreign key(ID_NO) references ENGINEERS(ID_NO)

 );

```
1  CREATE TABLE CUSTOMERS(
2      USER_ID VARCHAR(100) NOT NULL PRIMARY KEY,
3      CUSTOMER_NAME VARCHAR(100) NOT NULL,
4      CONTACT_NO INTEGER NOT NULL UNIQUE,
5      ALTERNATE_NO INTEGER NOT NULL UNIQUE,
6      EMAIL_ID VARCHAR(100) NOT NULL UNIQUE,
7      ADDRESS VARCHAR(500),
8      MANAGER_ID INTEGER NOT NULL,
9      OLT_NAME VARCHAR(100) NOT NULL,
10     ID_NO INTEGER NOT NULL,
11     FOREIGN KEY (MANAGER_ID) REFERENCES ZONE_MANAGERS(MANAGER_ID),
12     FOREIGN KEY (OLT_NAME) REFERENCES OLT(OLT_NAME),
13     FOREIGN KEY (ID_NO) REFERENCES ENGINEERS(ID_NO)
14 )
```
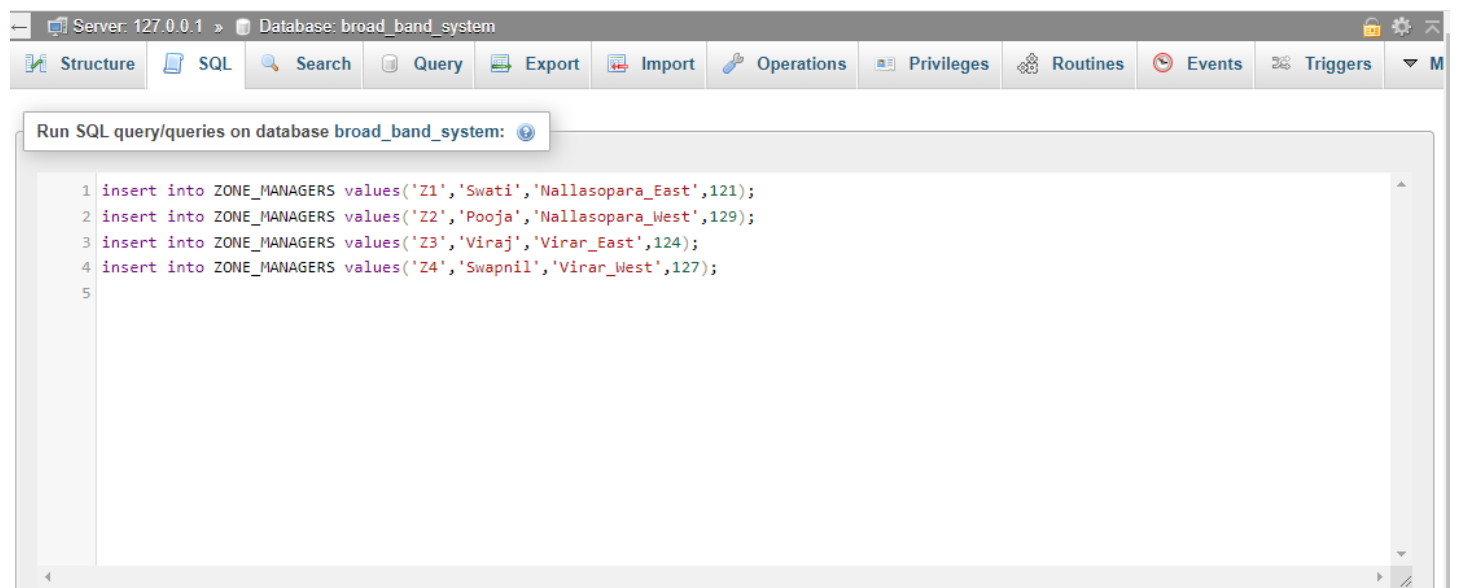
## Inserting Values:

### ZONE_MANAGERS

Table insert into ZONE_MANAGERS values('Z1','Swati','Nallasopara_East',121);

insert into ZONE_MANAGERS values('Z2','Pooja','Nallasopara_West',129);

insert into ZONE_MANAGERS values('Z3','Viraj','Virar_East',124);

insert into ZONE_MANAGERS values('Z4','Swapnil','Virar_West',127);

```
1  insert into ZONE_MANAGERS values('Z1','Swati','Nallasopara_East',121);
2  insert into ZONE_MANAGERS values('Z2','Pooja','Nallasopara_West',129);
3  insert into ZONE_MANAGERS values('Z3','Viraj','Virar_East',124);
4  insert into ZONE_MANAGERS values('Z4','Swapnil','Virar_West',127);
5
```

Show query box

✔ 1 row inserted. (Query took 0.0025 seconds.)

```
insert into ZONE_MANAGERS values('Z1','Swati','Nallasopara_East',121);
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

✔ 1 row inserted. (Query took 0.0018 seconds.)

```
insert into ZONE_MANAGERS values('Z2','Pooja','Nallasopara_West',129);
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

✔ 1 row inserted. (Query took 0.0015 seconds.)

```
insert into ZONE_MANAGERS values('Z3','Viraj','Virar_East',124);
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

✔ 1 row inserted. (Query took 0.0016 seconds.)

```
insert into ZONE_MANAGERS values('Z4','Swapnil','Virar_West',127);
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

## OLT

Table insert into OLT values ('MNE1','OLT-DB1','NSP(E)','Z1');

insert into OLT values('MVE1','OLT-DB19','VR(E)','Z3');

insert into OLT values('MNW1','OLT-DB22','NSP(W)','Z2');

insert into OLT values('MVE2','OLT-DB31','VR(E)','Z3');

insert into OLT values('MNE2','OLT-DB61','NSP(E)','Z1');

insert into OLT values('MVW2','OLT-DB24','VR(W)','Z4');

insert into OLT values('MVW1','OLT-DB53','VR(W)','Z4');

insert into OLT values('MNW2','OLT-DB23','NSP(W)','Z2');

Run SQL query/queries on database broad_band_system:

```
1  insert into OLT values('MNE1','OLT-DB1','NSP(E)','Z1');
2  insert into OLT values('MVE1','OLT-DB19','VR(E)','Z3');
3  insert into OLT values('MNW1','OLT-DB22','NSP(W)','Z2');
4  insert into OLT values('MVE2','OLT-DB31','VR(E)','Z3');
5  insert into OLT values('MNE2','OLT-DB61','NSP(E)','Z1');
6  insert into OLT values('MVW2','OLT-DB24','VR(W)','Z4');
7  insert into OLT values('MVW1','OLT-DB53','VR(W)','Z4');
8  insert into OLT values('MNW2','OLT-DB23','NSP(W)','Z2');
```

**ENGINEERS**

insert into ENGINEERS values('E01','Akash','Singh','Ram Nagar',0999888777,'Z4');

insert into ENGINEERS values('E02','Sam','Pillai','phase1',0888999777,'Z4');

insert into ENGINEERS values('E03','Vignesh','Kumar','Vivacollege Road',0666777888,'Z4');

insert into ENGINEERS values('E04','Sada','Sandeep','Vartak',0333222111,'Z3');

insert into ENGINEERS values('E05','Pramod','Kumar','Sunshine', 0666444888,'Z3');

insert into ENGINEERS values('E06','Santosh','Pradeep','Dmart Road',0111222333,'Z3');

insert into ENGINEERS values('E07','Deepak','Rathod','Indra nagar',0999666333,'Z2');

insert into ENGINEERS values('E08','Venkat','Rathod','90feet Road',0888555222,'Z2');

insert into ENGINEERS values('E09','Narsa','Singh','Pragati Nagar',0222555888,'Z2');

insert into ENGINEERS values('E10','Manoj','Vasant','Rehmat Nagar',0444555666,'Z1');

insert into ENGINEERS values('E11','Sandeep','Kumar','Nagindas',0111444777,'Z1');

insert into ENGINEERS values('E12','Sachin','Mudras','Oswtal',0333555777,'Z1');
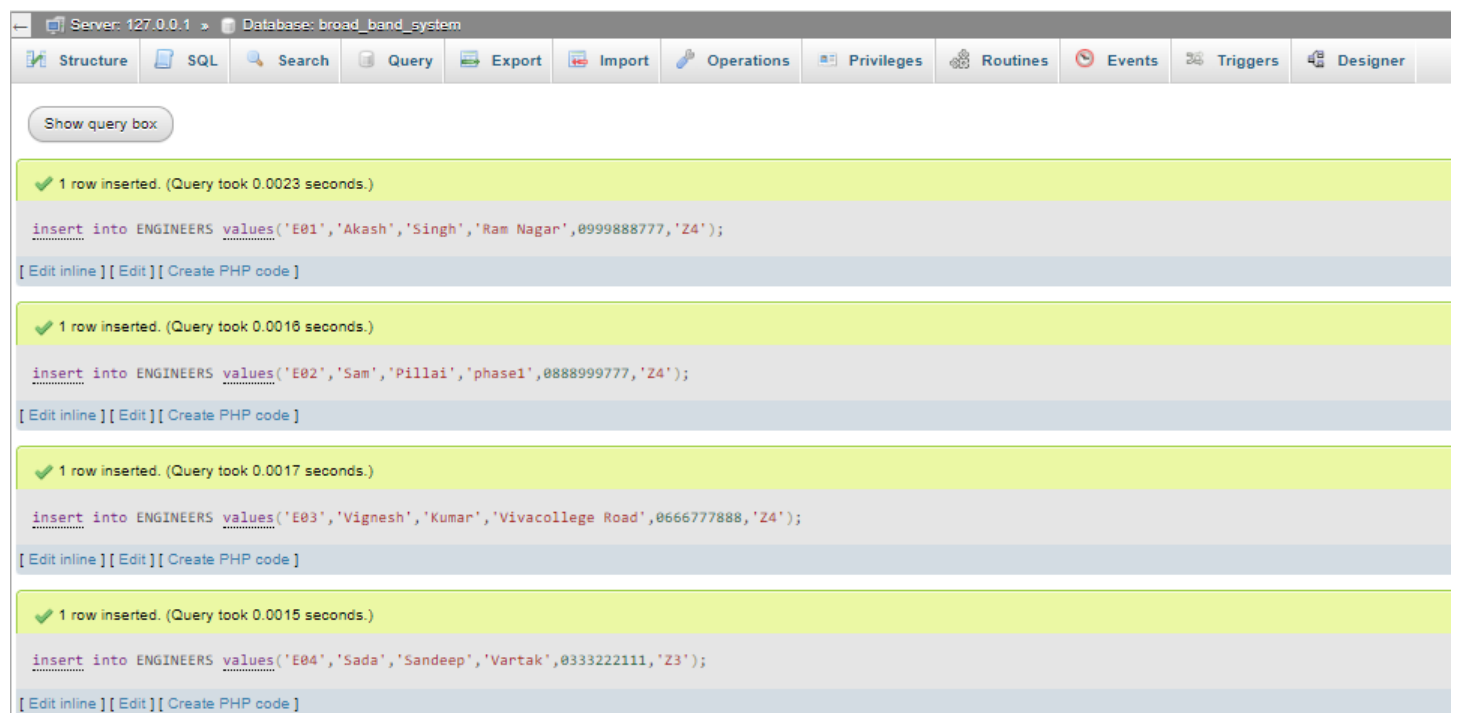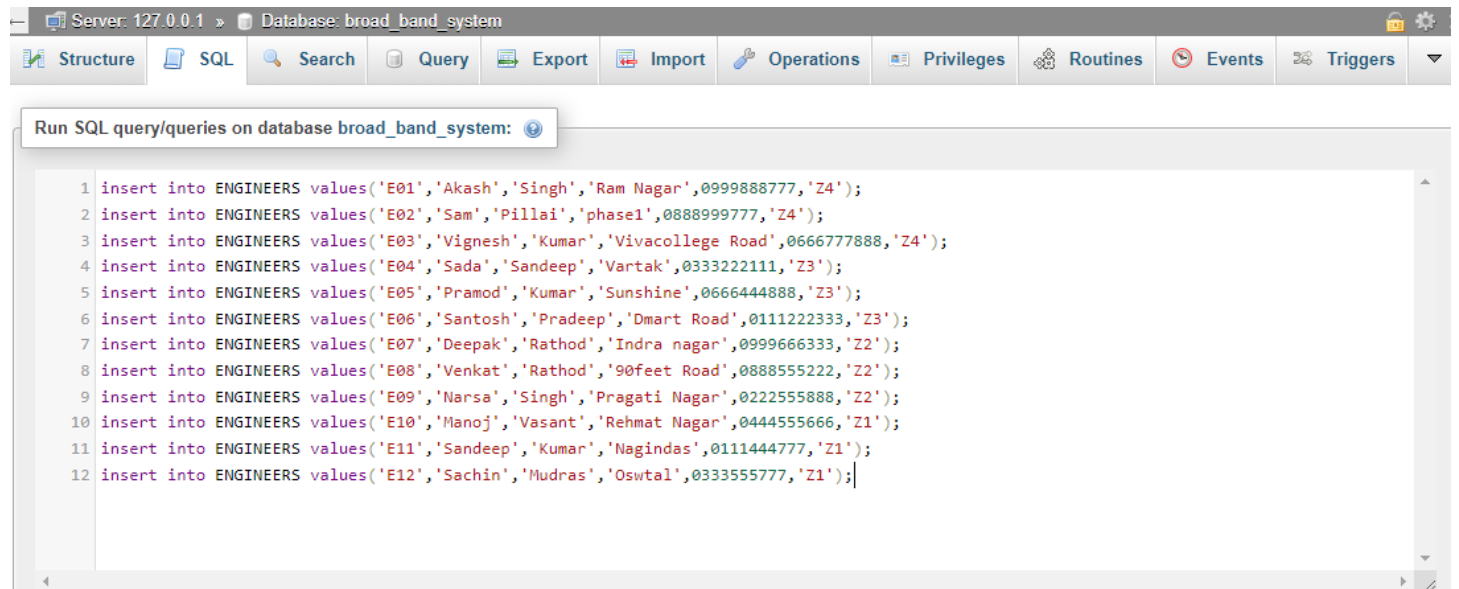




## CUSTOMERS

insert into CUSTOMERS values('C001','Ajithkumar',9146565788,9145567233,'aji####@gmail.com','Room no A/402,###Rehmatnagar','Z1','MNE1','E10');

insert into CUSTOMERS values('C002','Sam',8653264589,9996663332,'sam##@gmail.com','Room no ,809####,Pragatinagar','Z2','MNW1','E09');

insert into CUSTOMERS values('C003','Yash',9996548529,9912113335,null,'room no 203/b###indra nagar','Z2','MNW2','E07');

insert into CUSTOMERS values('C004','Pauldurai',8882223335,9912223335,'pauld##@gmail.com','rmnoA/410##,viva college rd','Z4','MVW2','E03');

insert into CUSTOMERS values('C005','Santhosh',9141562238,9145560003,'san1####@gmail.com','Room no 302,###OSTWAL','Z1','MNE2','E12');

insert into CUSTOMERS values('C006','Mayur',8552652396,null,'may##@gmail.com','roomno 303,##Vartak','Z3','MVE2','E04');

 insert into CUSTOMERS values('C007','Vekatesh',6665553231,7896585645,null,'Roomno222,##Dmart Road','Z3','MVE2','E06');

insert into CUSTOMERS values('C008','Manikandan',9996368526,4458796558,'mani112##@gmail.com','roomno211/ D,###vivacollege rd','Z4','MVW2','E03');

insert into CUSTOMERS values('C009','NirmalRathod',8885654265,null,null,'404/C,##Pragati Nagar','Z2','MNW1','E09');

insert into CUSTOMERS values('C010','Samirkhan',8787989894,8788558745,'samir@gmail.com','111,##Sunshine','Z3' ,'MVE1','E05');

insert into CUSTOMERS values('C011','Aayush',8653114589,8896663332,'aay112##@gmail.com','Room no ,809####,Pragatinagar','Z2','MNW1','E09');

 insert into CUSTOMERS values('C012','Raghu',8246565788,8896664132,null,'Room no b/402,###ostwal','Z1','MNE2','E12');

insert into CUSTOMERS values('C013','Ravi',9996355626,8966663332,null,'Rno 123##Vartak','Z3','MVE2','E04');

 insert into CUSTOMERS values('C014','ShenaPawar',9989768526,8882213335,'ShenaP#@gmail.com','Roomnno 414##Sunshine','Z3','MVE1','E05');

insert into CUSTOMERS values('C015','Arvind',8223264589,9996123332,'arv##@gmail.com','Room no ,007####,Pragatinagar','Z2','MNW1','E09');

insert into CUSTOMER values('C016','shrutika',9665487896,9228855465,'shr@gmail.com','Room002##phase1','Z4',' MVW1','E02');

 insert .into CUSTOMERS values('C017','Charu',7722668956,8978798978,'charu@gmail.com','##near Ram Nagar','Z4','MVW2','E01');

insert into CUSTOMERS values('C018','Vinoth',9116565788,null,'vi####@gmail.com','002###Rehmatnagar','Z1','MNE 1','E10');

insert into CUSTOMERS values('C019','Bendre Nisha',8884848335,8184848335,'bendre@gmail.com','Roomno303##Ram Nagar','Z4','MVW2','E01');

insert into CUSTOMERS values('C020','Selvi',9145116573,8145116777,null,'Roomno 221##Ram Nagar','Z4','MVW2','E01');

insert into CUSTOMERS values('C021','Kala',8529637415,3692581478,'Kala@gmail.com','##near bakery Sunshine rd','Z3','MVE1','E05');

insert into CUSTOMERS values('C022','Hitesh',9146565000,9123567233,'hit23####@gmail.com','Room no d/301,###Rehmatnagar','Z1','MNE1','E10');

insert into CUSTOMERS values('C023','Kalidasan',8145116578,null,'kali####@gmail.com','Room no A/002,###nagindas','Z1','MNE2','E11');
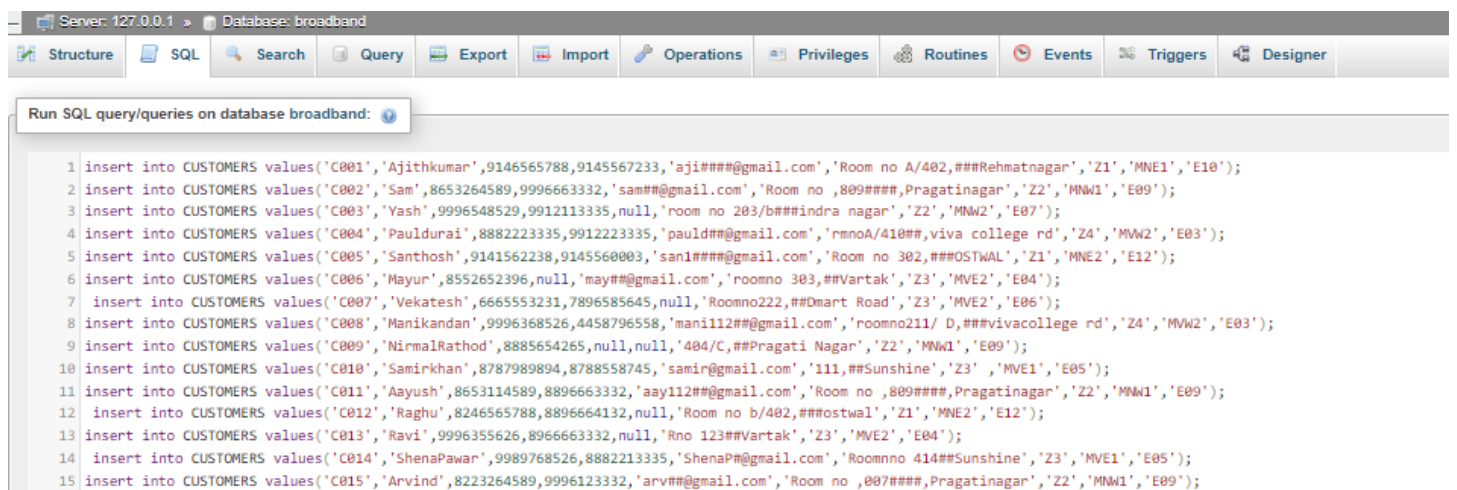
insert into CUSTOMERS values('C024','Ruhsi',9145656799,null,null,'roomno 101##Vartak mainrd','Z3','MVE2','E04');

insert into CUSTOMERS values('C025','Rohit Mudras',9998882229,9998884444,'rohit@gmail.com','##Vartak','Z3','MVE2','E04');

insert into CUSTOMERS values('C026','Saurandeep',8124848335,9126368526,'saura@gmail.com','Room no 404##Ram Nagar','Z4','MVW2','E01');

insert into CUSTOMERS values('C027','deva Krishna',8224848335,null,'deva@gmail.com','Room no near vedant school,phase1','Z4','MVW1','E02')
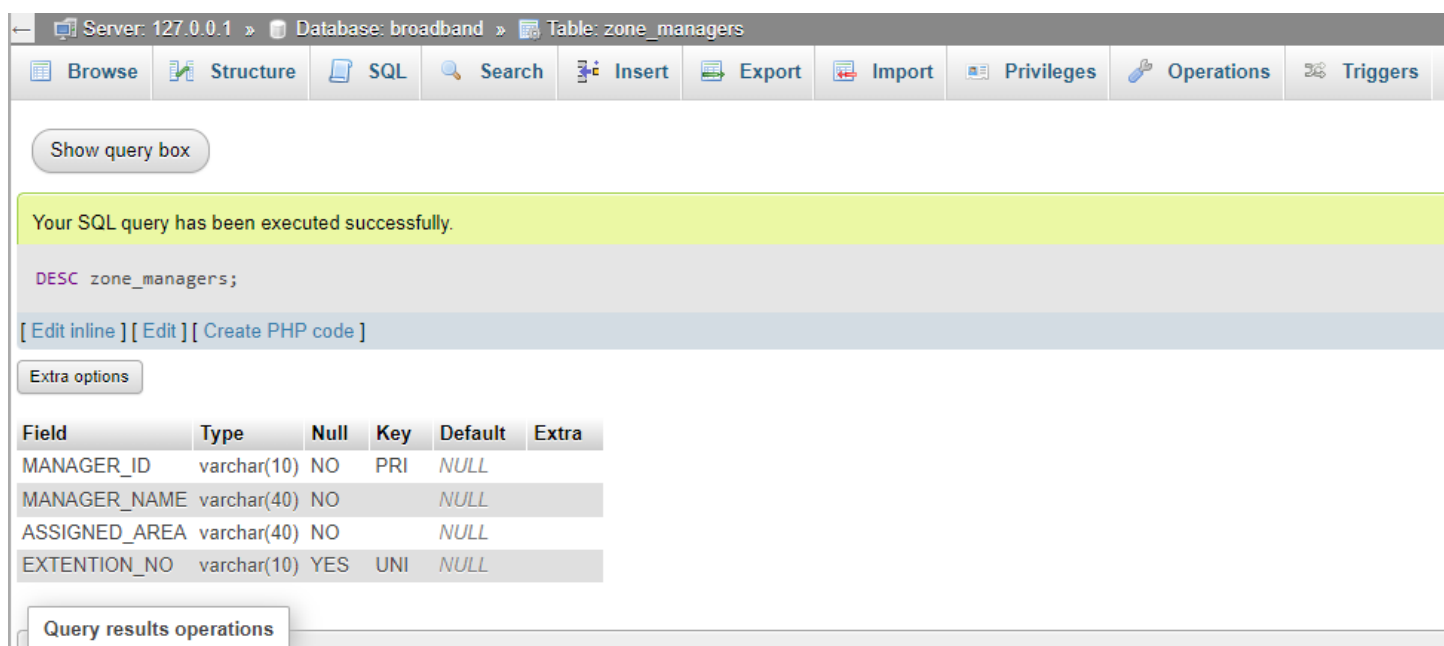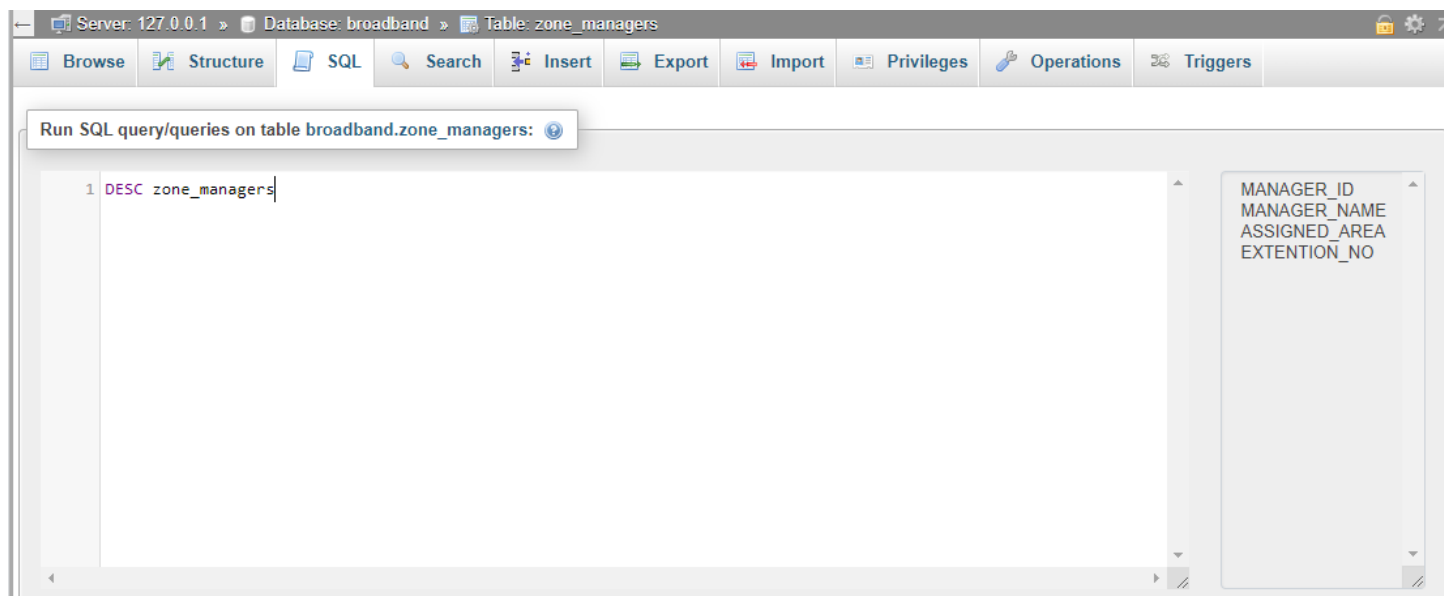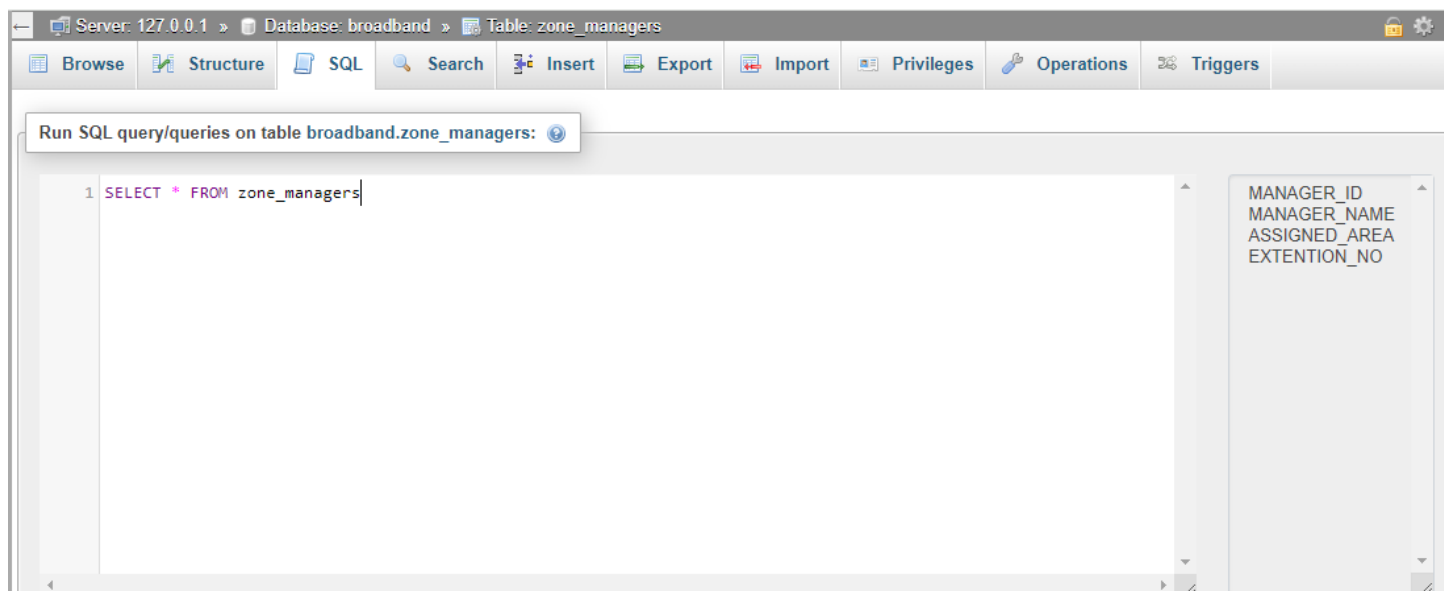


## Performed Following Conditions:-

Q1 .Describe ZONE_MANAGERS table Structure?

→ Desc ZONE_MANAGERS;

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.zone_managers:

```
1 DESC zone_managers
```

MANAGER_ID
MANAGER_NAME
ASSIGNED_AREA
EXTENTION_NO

---

Server: 127.0.0.1 » Database: broadband » Table: zone_managers

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

Your SQL query has been executed successfully.

```
DESC zone_managers;
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

Extra options

| Field | Type | Null | Key | Default | Extra |
|-------|------|------|-----|---------|-------|
| MANAGER_ID | varchar(10) | NO | PRI | NULL | |
| MANAGER_NAME | varchar(40) | NO | | NULL | |
| ASSIGNED_AREA | varchar(40) | NO | | NULL | |
| EXTENTION_NO | varchar(10) | YES | UNI | NULL | |

Query results operations

---

Q2. Fetch all Zone managers Table?

→ Select * from ZONE_MANAGERS;

Server: 127.0.0.1 » Database: broadband » Table: zone_managers

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.zone_managers:

```
1 SELECT * FROM zone_managers
```

MANAGER_ID
MANAGER_NAME
ASSIGNED_AREA
EXTENTION_NO

Q3. Fetch Zone managers names of assigned zone of Nallasopara East?

→ Select MANAGER_NAME from ZONE_MANAGERS where ASSIGNED_AREA='Nallasopara_East';

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

✔ Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)

/*Fetch Zone managers names of assigned zone of Nallasopara East?*/ SELECT MANAGER_NAME FROM zone_managers WHERE ASSIGNED_AREA = 'Nallasopara_East';

[ Edit inline ] [ Edit ] [ Create PHP code ]

☐ Show all | Number of rows: 25 ∨ Filter rows: Search this table

Extra options

→T← | **MANAGER_NAME**
☐ ✏ Edit ⌗ Copy ⊝ Delete Swati

Q4. Rename column OLT_NAME temporary?

→Select OLT_NAME as OLT_No_id from OLT;

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.olt: ⊚

```
1 /*Rename column OLT_NAME temporary?*/
2 SELECT OLT_NAME AS OLT_ID_NO FROM olt;
```

OLT_NAME
OLT_MACID
OLT_PLACED
MANAGER_ID

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

✔ Showing rows 0 - 7 (8 total, Query took 0.0006 seconds.)

/*Rename column OLT_NAME temporary?*/ SELECT OLT_NAME AS OLT_ID_NO FROM olt;

[ Edit inline ] [ Edit ] [ Create PHP code ]

☐ Show all | Number of rows: 25 ▾ | Filter rows: Search this table | Sort by key: None ▾

Extra options

| ←T→ | | | | OLT_ID_NO |
|---|---|---|---|---|
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MNE1 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MNE2 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MNW1 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MNW2 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MVE1 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MVE2 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MVW1 |
| ☐ | ✏ Edit | ⊰ Copy | ⊝ Delete | MVW2 |

Q5.Update OLT_MACID ("OLTNew-DB22") "MNW1" of OLT_NAME ?

→update OLT set OLT_MACID='OLTNew-DB22' where OLT_NAME='MNW1';

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.olt: ⊚

```
1 UPDATE olt SET OLT_MACID='OLTNEW22'WHERE OLT_NAME='MNW1'
```

OLT_NAME
OLT_MACID
OLT_PLACED
MANAGER_ID

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

✔ Showing rows 0 - 7 (8 total, Query took 0.0004 seconds.)

SELECT * FROM `olt`

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 ▾ | Filter rows: Search this table | Sort by key: None ▾

Extra options

| | | | | OLT_NAME | OLT_MACID | OLT_PLACED | MANAGER_ID |
|---|---|---|---|---|---|---|---|
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MNE1 | OLT-DB1 | NSP(E) | Z1 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MNE2 | OLT-DB61 | NSP(E) | Z1 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MNW1 | OLTNEW22 | NSP(W) | Z2 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MNW2 | OLT-DB23 | NSP(W) | Z2 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MVE1 | OLT-DB19 | VR(E) | Z3 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MVE2 | OLT-DB31 | VR(E) | Z3 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MVW1 | OLT-DB53 | VR(W) | Z4 |
| ☐ | 🖉 Edit | Copy | ⊖ Delete | MVW2 | OLT-DB24 | VR(W) | Z4 |

Q6. Fetch unique ID_NO and sort in ascending order?
→select distinct(ID_NO),OLT_NAME from CUSTOMERS where ID_NO in (select ID_NO from ENGINEERS)order by ID_NO;

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.customers: ⊚

```
1 /*Fetch unique ID_NO and sort in ascending order?*/
2
3 SELECT DISTINCT(ID_NO), OLT_NAME FROM customers ORDER BY ID_NO
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

Browse    Structure    SQL    Search    Insert    Export    Import    Privileges    Operations    Triggers

Showing rows 0 - 10 (11 total, Query took 0.0007 seconds.) [ID_NO: E01... - E12...]

/*Fetch unique ID_NO and sort in ascending order?*/ SELECT DISTINCT(ID_NO), OLT_NAME FROM customers ORDER BY ID_NO;

[ Edit inline ] [ Edit ] [ Create PHP code ]

Show all    Number of rows:    25 ▾    Filter rows:    Search this table    Sort by key:    None ▾

Extra options

| ←T→ | | | | ID_NO ▲ 1 | OLT_NAME |
|---|---|---|---|---|---|
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E01 | MVW2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E02 | MVW1 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E03 | MVW2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E04 | MVE2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E05 | MVE1 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E06 | MVE2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E07 | MNW2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E09 | MNW1 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E10 | MNE1 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E11 | MNE2 |
| ☐ | ✎ Edit | ᴣ·ᵢ Copy | ⊖ Delete | E12 | MNE2 |

Q7. Fetch only 3 rows ENGINEERS details and sort column FIRST_NAME descending order from ENGINEERS table?

→Select * from ENGINEERS order by FIRST_NAME DESC LIMIT 3

Browse    Structure    SQL    Search    Insert    Export    Import    Privileges    Operations    Triggers

Run SQL query/queries on table broadband.engineers: ⊘

```
1 /*Fetch only 3 rows ENGINEERS details and sort column FIRST_NAME descending
2 order from ENGINEERS table?*/
3 SELECT * FROM engineers ORDER BY FIRST_NAME DESC LIMIT 3
```

ID_NO
FIRST_NAME
LAST_NAME
ASSIGNED_AREA
CONTACT_NO
MANAGER_ID

Browse   Structure   SQL   Search   Insert   Export   Import   Privileges   Operations   Triggers

Show query box

✓ Showing rows 0 - 2 (3 total, Query took 0.0006 seconds.) [FIRST_NAME: **VIGNESH... - SANTOSH...**]

/*Fetch only 3 rows ENGINEERS details and sort column FIRST_NAME descending order from ENGINEERS table?*/ SELECT * FROM engineers ORDER BY F
DESC LIMIT 3;

[ Edit inline ] [ Edit ] [ Create PHP code ]

Extra options

| | | | | ID_NO | FIRST_NAME ▼ 1 | LAST_NAME | ASSIGNED_AREA | CONTACT_NO | MANAGER_ID |
|---|---|---|---|---|---|---|---|---|---|
| ☐ | Edit | Copy | Delete | E03 | Vignesh | Kumar | Vivacollege Road | 666777888 | Z4 |
| ☐ | Edit | Copy | Delete | E08 | Venkat | Rathod | 90feet Road | 888555222 | Z2 |
| ☐ | Edit | Copy | Delete | E06 | Santosh | Pradeep | Dmart Road | 111222333 | Z3 |

↑   ☐ Check all   With selected:   Edit   Copy   Delete   Export

Q8. Fetch Customers details of virar-east zone?

→select * from CUSTOMERS where MANAGER_ID in(select MANAGER_ID from ZONE_MANAGERS where ASSIGNED_AREA='Virar_East')

Browse   Structure   SQL   Search   Insert   Export   Import   Privileges   Operations   Triggers

Run SQL query/queries on table broadband.CUSTOMERS: ⊚

```
1 /*Fetch Customers details of virar-east zone?*/
2
3 select * from CUSTOMERS where MANAGER_ID in(select MANAGER_ID from
4 ZONE_MANAGERS where ASSIGNED_AREA='Virar_East')
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

✔ Showing rows 0 - 7 (8 total, Query took 0.0008 seconds.)

/*Fetch Customers details of virar-east zone?*/ select * from CUSTOMERS where MANAGER_ID in(select MANAGER_ID from ZONE_MANAGERS where ASSIGNED_AREA='Virar_East');

[ Edit inline ] [ Edit ] [ Create PHP code ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

| | | | USER_ID | CUSTOMER_NAME | CONTACT_NO | ALTERNATE_NO | EMAIL_ID | ADDRESS | MANAGER_ID | OLT_NAME | ID_NO |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | Edit | Copy | Delete | C006 | Mayur | 8552652396 | NULL | may##@gmail.com | roomno 303,##Vartak | Z3 | MVE2 | E04 |
| ☐ | Edit | Copy | Delete | C007 | Vekatesh | 6665553231 | 7896585645 | NULL | Roomno222,##Dmart Road | Z3 | MVE2 | E06 |
| ☐ | Edit | Copy | Delete | C010 | Samirkhan | 8787989894 | 8788558745 | samir@gmail.com | 111,##Sunshine | Z3 | MVE1 | E05 |
| ☐ | Edit | Copy | Delete | C013 | Ravi | 9996355626 | 8966663332 | NULL | Rno 123##Vartak | Z3 | MVE2 | E04 |
| ☐ | Edit | Copy | Delete | C014 | ShenaPawar | 9989768526 | 8882213335 | ShenaP#@gmail.com | Roomnno 414##Sunshine | Z3 | MVE1 | E05 |
| ☐ | Edit | Copy | Delete | C021 | Kala | 8529637415 | 3692581478 | Kala@gmail.com | ##near bakery Sunshine rd | Z3 | MVE1 | E05 |
| ☐ | Edit | Copy | Delete | C024 | Ruhsi | 9145656799 | NULL | NULL | roomno 101##Vartak mainrd | Z3 | MVE2 | E04 |
| ☐ | Edit | Copy | Delete | C025 | Rohit Mudras | 9998882229 | 9998884444 | rohit@gmail.com | ##Vartak | Z3 | MVE2 | E04 |

Q9. Fetch Customer details by following conditions:- Customer name-starts with "A"?

→Select * from CUSTOMERS where CUSTOMER_NAME like "A%";

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.customers: ⓘ

```
1 /*Customer name-starts with "A"?*/
2
3 SELECT * FROM customers where CUSTOMER_NAME Like 'A%';
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

✔ Showing rows 0 - 2 (3 total, Query took 0.0005 seconds.)

/*Customer name-starts with "A"?*/ SELECT * FROM customers where CUSTOMER_NAME Like 'A%';

[ Edit inline ] [ Edit ] [ Create PHP code ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

| | | | USER_ID | CUSTOMER_NAME | CONTACT_NO | ALTERNATE_NO | EMAIL_ID | ADDRESS | MANAGER_ID | OLT_NAME | ID_NO |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | Edit | Copy | Delete | C001 | Ajithkumar | 9146565788 | 9145567233 | aji####@gmail.com | Room no A/402,###Rehmatnagar | Z1 | MNE1 | E10 |
| ☐ | Edit | Copy | Delete | C011 | Aayush | 8653114589 | 8896663332 | aay112##@gmail.com | Room no ,809####,Pragatinagar | Z2 | MNW1 | E09 |
| ☐ | Edit | Copy | Delete | C015 | Arvind | 8223264589 | 9996123332 | arv##@gmail.com | Room no ,007####,Pragatinagar | Z2 | MNW1 | E09 |

9b)Customer Second last word name-ends with "r"?

→Select * from CUSTOMERS where CUSTOMER_NAME like "%r_";





Q10. Fetch count of Customer details whose OLT is connected in "MNW1"?

→select count(*) as Total_Customers from CUSTOMERS where OLT_NAME in (select OLT_NAME from OLT where OLT_NAME='MNW1');

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available. ⓘ

Your SQL query has been executed successfully.

```
/*Fetch count of Customer details whose OLT is connected in "MNW1"?*/ SELECT COUNT(*) AS TOTAL_CUSTOMERS FROM customers WHERE OLT_NAME IN (SELECT OLT_NAME FROM olt WHERE
OLT_NAME = 'MNW1');
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

Extra options

| TOTAL_CUSTOMERS |
|---|
| 4 |

Q11) Fetch Customer_ID whose OLT placed in Nallasopara_West ?

→Select USER_ID from CUSTOMERS where in OLT_NAME (select OLT_NAME from OLT where in MANAGER_ID(select MANAGER_ID from ZONE_MANAGERS where ASSIGNED_AREA="Nallasopara_West"))

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.customers: ⓘ

```
1  /*Fetch Customer_ID whose OLT placed in Nallasopara_West ?*/
2  Select USER_ID from CUSTOMERS where OLT_NAME in
3  (select OLT_NAME from OLT where MANAGER_ID in (select MANAGER_ID from
4  ZONE_MANAGERS where ASSIGNED_AREA="Nallasopara_West"))
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

✓ Showing rows 0 - 4 (5 total, Query took 0.0008 seconds.)

```
/*Fetch Customer_ID whose OLT placed in Nallasopara_West ?*/ Select USER_ID from CUSTOMERS where OLT_NAME in (select OLT_NAME from OLT where MANAGER_ID in (select
MANAGER_ID from ZONE_MANAGERS where ASSIGNED_AREA="Nallasopara_West"));
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

☐ Show all | Number of rows: 25 ▾   Filter rows: Search this table   Sort by key: None ▾

Extra options

| ←T→ | | | USER_ID |
|---|---|---|---|
| ☐ | ✏ Edit | 3-ⁱ Copy | ⊖ Delete | C002 |
| ☐ | ✏ Edit | 3-ⁱ Copy | ⊖ Delete | C009 |
| ☐ | ✏ Edit | 3-ⁱ Copy | ⊖ Delete | C011 |
| ☐ | ✏ Edit | 3-ⁱ Copy | ⊖ Delete | C015 |
| ☐ | ✏ Edit | 3-ⁱ Copy | ⊖ Delete | C003 |

Q12) Fetch details of CUSTOMERS(User_ID,CUSTOMER_NAME,CONTACT_NO) and details of ENGINEERS( ID_NO,ASSIGNED_AREA,CONTACT_NO) ,where ASSIGNED_AREA is "Rehmat Nagar" and "Ram Nagar" by using inner joins.

→Select a.User_ID as CUSTOMER_ID,a.CUSTOMER_NAME,a.CONTACT_NO as MOBILE_NUMBER,b.ID_NO asENGINEEER_ID,b.ASSIGNED_AREA,b.CONTACT_NO from CUSTOMERS a inner join ENGINEERS b on a.ID_NO=b.ID_NO where b.ASSIGNED_AREA='Rehmat Nagar' or b.ASSIGNED_AREA='Ram Nagar'

order by b.ASSIGNED_AREA



```
1  /*Fetch details of CUSTOMERS(User_ID,CUSTOMER_NAME,CONTACT_NO) and
2  details of ENGINEERS( ID_NO,ASSIGNED_AREA,CONTACT_NO) ,where
3  ASSIGNED_AREA is "Rehmat Nagar" and "Ram Nagar" by using inner joins.*/
4  Select a.User_ID as CUSTOMER_ID,a.CUSTOMER_NAME,a.CONTACT_NO as
5  MOBILE_NUMBER,b.ID_NO asENGINEEER_ID,b.ASSIGNED_AREA,b.CONTACT_NO
6  from CUSTOMERS a inner join ENGINEERS b on a.ID_NO=b.ID_NO where
7  b.ASSIGNED_AREA='Rehmat Nagar' or b.ASSIGNED_AREA='Ram Nagar' order by
8  b.ASSIGNED_AREA
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO



Show query box

⚠ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✔ Showing rows 0 - 5 (6 total, Query took 0.0008 seconds.) [ASSIGNED_AREA: **RAM NAGAR...** - **REHMAT NAGAR...**]

/*Fetch details of CUSTOMERS(User_ID,CUSTOMER_NAME,CONTACT_NO) and details of ENGINEERS( ID_NO,ASSIGNED_AREA,CONTACT_NO) ,where ASSIGNED_AREA is "Rehmat Nagar" and "Ram Nagar" by using inner joins.*/ Select a.User_ID as CUSTOMER_ID,a.CUSTOMER_NAME,a.CONTACT_NO as MOBILE_NUMBER,b.ID_NO asENGINEEER_ID,b.ASSIGNED_AREA,b.CONTACT_NO from CUSTOMERS a inner join ENGINEERS b on a.ID_NO=b.ID_NO where b.ASSIGNED_AREA='Rehmat Nagar' or b.ASSIGNED_AREA='Ram Nagar' order by b.ASSIGNED_AREA;

[ Edit inline ] [ Edit ] [ Create PHP code ]

☐ Show all | Number of rows: 25 ⌄   Filter rows: Search this table   Sort by key: None ⌄

Extra options

| CUSTOMER_ID | CUSTOMER_NAME | MOBILE_NUMBER | asENGINEEER_ID | ASSIGNED_AREA ▲ 1 | CONTACT_NO |
|---|---|---|---|---|---|
| C017 | Charu | 7722668956 | E01 | Ram Nagar | 999888777 |
| C019 | Bendre Nisha | 8884848335 | E01 | Ram Nagar | 999888777 |
| C026 | Saurandeep | 8124848335 | E01 | Ram Nagar | 999888777 |
| C001 | Ajithkumar | 9146565788 | E10 | Rehmat Nagar | 444555666 |
| C018 | Vinoth | 9116565788 | E10 | Rehmat Nagar | 444555666 |
| C022 | Hitesh | 9146565000 | E10 | Rehmat Nagar | 444555666 |

Q13) Fetch CUSTOMER_NAME,CONTACT_NO,ID_NO by using equivelent join?

→Select b.ID_NO as Engineer_ID,a.CUSTOMER_NAME,b.CONTACT_NO as Engineer_No from CUSTOMERS a,ENGINEERS b where a.ID_NO=b.ID_NO order by CUSTOMER_NAME desc;



```
1  /*Fetch CUSTOMER_NAME,CONTACT_NO,ID_NO by using equivelent join?*/
2  Select b.ID_NO as Engineer_ID,a.CUSTOMER_NAME,b.CONTACT_NO as
3  Engineer_No from CUSTOMERS a,ENGINEERS b where a.ID_NO=b.ID_NO
4  order by CUSTOMER_NAME desc;
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

| Engineer_ID | CUSTOMER_NAME ▼ 1 | Engineer_No |
|---|---|---|
| E07 | Yash | 999666333 |
| E10 | Vinoth | 444555666 |
| E06 | Vekatesh | 111222333 |
| E02 | shrutika | 888999777 |
| E05 | ShenaPawar | 666444888 |
| E01 | Saurandeep | 999888777 |
| E12 | Santhosh | 333555777 |
| E05 | Samirkhan | 666444888 |
| E09 | Sam | 222555888 |
| E04 | Ruhsi | 333222111 |
| E04 | Rohit Mudras | 333222111 |
| E04 | Ravi | 333222111 |
| E12 | Raghu | 333555777 |
| E03 | Pauldurai | 666777888 |
| E09 | NirmalRathod | 222555888 |
| E04 | Mayur | 333222111 |
| E03 | Manikandan | 666777888 |
| E11 | Kalidasan | 111444777 |
| E05 | Kala | 666444888 |
| E10 | Hitesh | 444555666 |
| E02 | deva Krishna | 888999777 |
| E01 | Charu | 999888777 |
| E01 | Bendre Nisha | 999888777 |
| E09 | Arvind | 222555888 |
| E10 | Ajithkumar | 444555666 |

Q14)Delete details of customer (USER_ID='C009')?

→Delete from CUSTOMERS where USER_ID='C009'

Server: 127.0.0.1 » Database: broadband » Table: CUSTOMERS

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.CUSTOMERS:

```
1 /*Delete details of customer (USER_ID='C009')?*/
2 Delete from CUSTOMERS where USER_ID='C009'
```

USER_ID
CUSTOMER_NAME
CONTACT_NO
ALTERNATE_NO
EMAIL_ID
ADDRESS
MANAGER_ID
OLT_NAME
ID_NO

Server: 127.0.0.1 » Database: broadband » Table: CUSTOMERS

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Show query box

✓ 1 row deleted. (Query took 0.0028 seconds.)

/*Delete details of customer (USER_ID='C009')?*/ Delete from CUSTOMERS where USER_ID='C009';

[ Edit inline ] [ Edit ] [ Create PHP code ]

Q15)Delete details of customer whose email is NULL?

→Delete from CUSTOMERS where EMAIL_ID is null





Q18) Truncate the Customers details?

→Truncate table Customers

```
Server: 127.0.0.1 »  Database: broadband  »  Table: customers

  Browse     Structure     SQL     Search     Insert     Export     Import     Privileges     Operations     Triggers

  Show query box

  ✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0659 seconds.)

  /*Truncate the Customers details?*/ Truncate table Customers;

[ Edit inline ] [ Edit ] [ Create PHP code ]
```

Q19)Drop OLT table?

→ Drop table Customers



```
Server: 127.0.0.1 »  Database: broadband  »  Table: customers

  Browse     Structure     SQL     Search     Insert     Export     Import     Privileges     Operations     Triggers

  Run SQL query/queries on table broadband.customers:  ?

  1 /*Drop customers table?*/
  2 Drop table Customers

                                                                    USER_ID
                                                                    CUSTOMER_NAME
                                                                    CONTACT_NO
                                                                    ALTERNATE_NO
                                                                    EMAIL_ID
                                                                    ADDRESS
                                                                    MANAGER_ID
                                                                    OLT_NAME
                                                                    ID_NO
```

Q19)Drop OLT table?

→ Drop table OLT

Browse | Structure | SQL | Search | Insert | Export | Import | Privileges | Operations | Triggers

Run SQL query/queries on table broadband.customers:

```
1  /*DROP OLT table*/
2  Drop table OLT
```

Server: 127.0.0.1 » Database: broadband

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers

Show query box

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0057 seconds.)

/*DROP OLT table*/ Drop table OLT;

[ Edit inline ] [ Edit ] [ Create PHP code ]

Q20) Drop Engineers table?

→ Drop table Engineers

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers

Run SQL query/queries on database broadband:

```
1  /*Drop Engineer table?*/
2  Drop table Engineers
3
```

| ⬛ Structure | 📄 SQL | 🔍 Search | 📋 Query | 📤 Export | 📥 Import | 🔧 Operations | 📇 Privileges | ⚙ Routines | 🕐 Events | 📛 Triggers | ▼ |
|---|---|---|---|---|---|---|---|---|---|---|---|

Show query box

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0066 seconds.)

/*Drop Engineer table?*/ Drop table Engineers;

[ Edit inline ] [ Edit ] [ Create PHP code ]

Q20) Drop Zone_Managers table?

→ Drop table Zone_Managers

| ⬛ Structure | 📄 SQL | 🔍 Search | 📋 Query | 📤 Export | 📥 Import | 🔧 Operations | 📇 Privileges | ⚙ Routines | 🕐 Events | 📛 Triggers | ▼ |
|---|---|---|---|---|---|---|---|---|---|---|---|

Run SQL query/queries on database broadband: ⓘ

```
1  /* Drop zone_managers table*/
2  Drop table ZONE_MANAGERS
```

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events | Triggers

Show query box

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0061 seconds.)

/* Drop zone_managers table*/ Drop table ZONE_MANAGERS;

[ Edit inline ] [ Edit ] [ Create PHP code ]

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0061 seconds.)

Show query box

/* Drop zone_managers table*/ Drop table ZONE_MANAGERS;