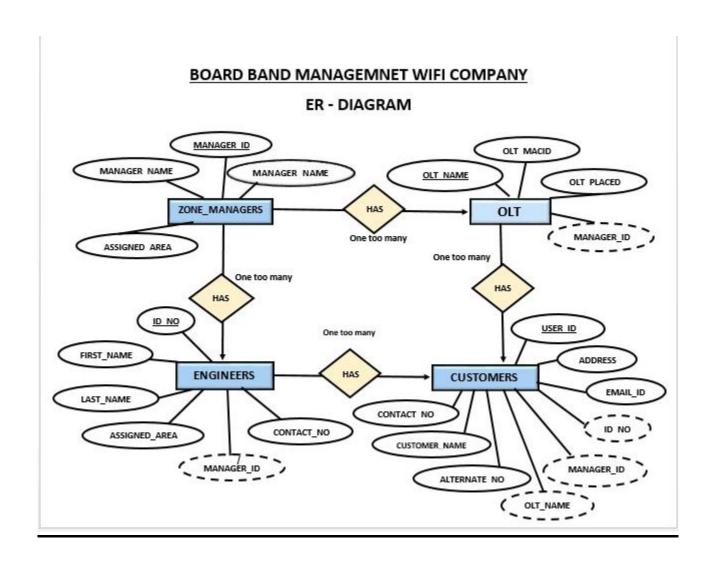
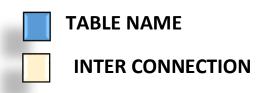
*** SQL PROJECT ***

Board band Management System

(Wi-Fi-Company)







Summary:-

Project done by using **Live Oracle SQL** tool. Created **four Tables** (Zonemangers table, OLT table, Engineers Table , Customers Table) .Inserted multiple values and interconnected tables by using **foreign keys** .Fetched Data by different conditions. For Examples :- fetched single columns, **alias**, **sub query**, **update**, **created views**, **inner join**, **delete**, **order by**, **truncate**, **drop in table**.

Project Link:

https://livesql.oracle.com/apex/livesql/s/odhb5ibcuo33qg2nrifivnao1

Created Tables:

```
Create table ZONE_MANAGERS(

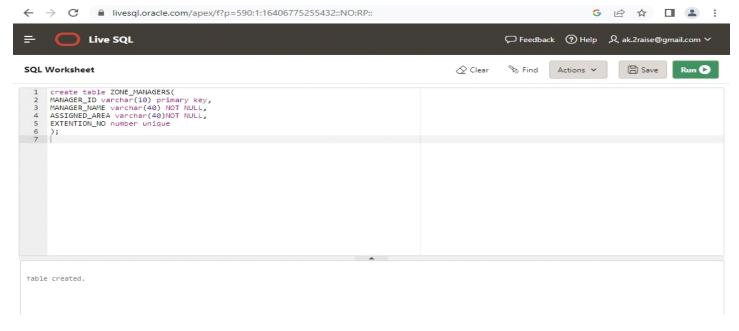
MANAGER_ID varchar(10) primary key,

MANAGER_NAME varchar(40) NOT NULL,

ASSIGNED_AREA varchar(40) NOT NULL,

EXTENTION_NO number unique

);
```



create table OLT(

OLT_NAME varchar(100) primary key,

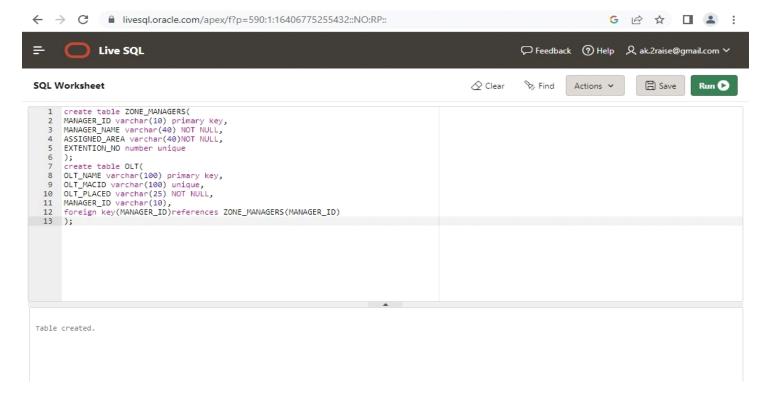
OLT_MACID varchar(100) unique,

OLT_PLACED varchar(25) NOT NULL,

MANAGER_ID varchar(10),

Foreign key(MANAGER_ID) references ZONE_MANAGERS(MANAGER_ID)

);



Create table ENGINEERS(

ID_NO varchar(50) primary key,

FIRST_NAME varchar(50) NOT NULL,

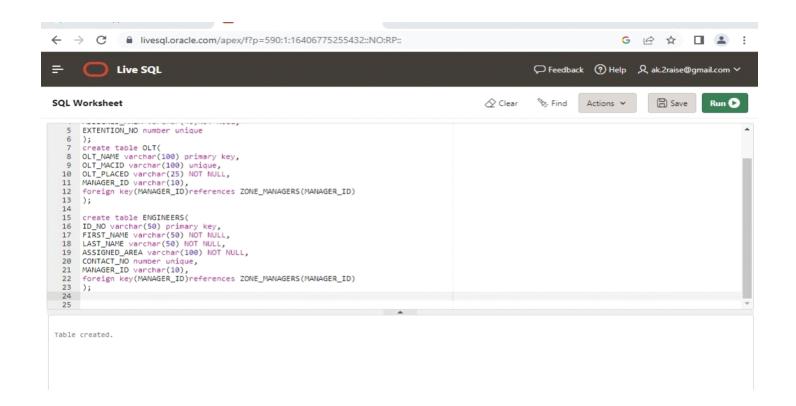
LAST_NAME varchar(50) NOT NULL,

ASSIGNED_AREA varchar(100) NOT NULL,

CONTACT_NO number unique,

MANAGER_ID varchar(10),

Foreign key(MANAGER_ID) references ZONE_MANAGERS(MANAGER_ID)



Create table CUSTOMERS(

USER_ID varchar(100) primary key,

CUSTOMER_NAME varchar(50) NOT NULL,

CONTACT_NO number(10) NOT NULL,

ALTERNATE_NO number(10) unique,

);

```
EMAIL_ID varchar(100) unique,

ADDRESS varchar(500),

MANAGER_ID varchar(10),

OLT_NAME varchar(100),

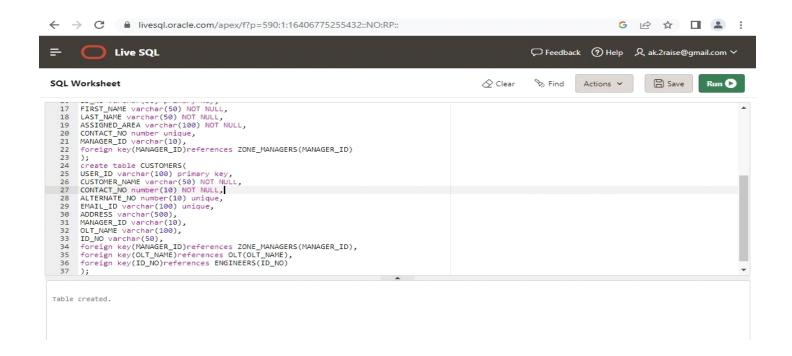
ID_NO varchar(50),

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)

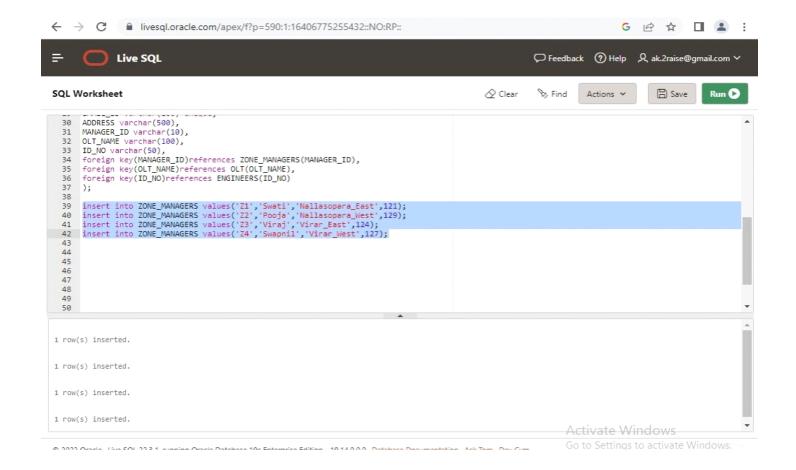
);
```



Inserting Values:

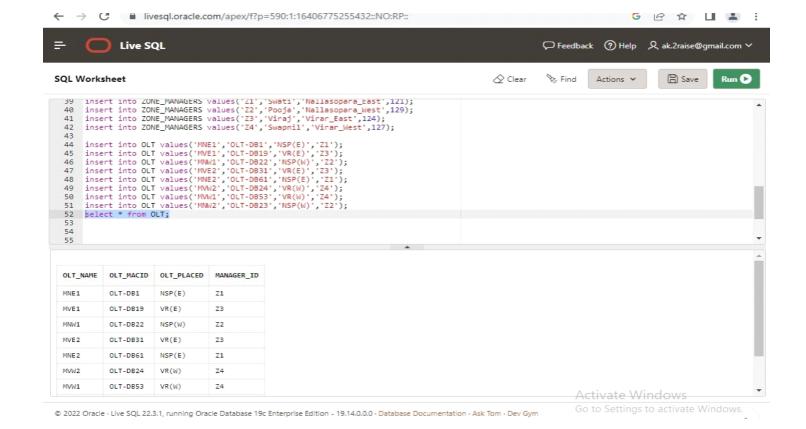
ZONE_MANAGERS Table

```
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);
```



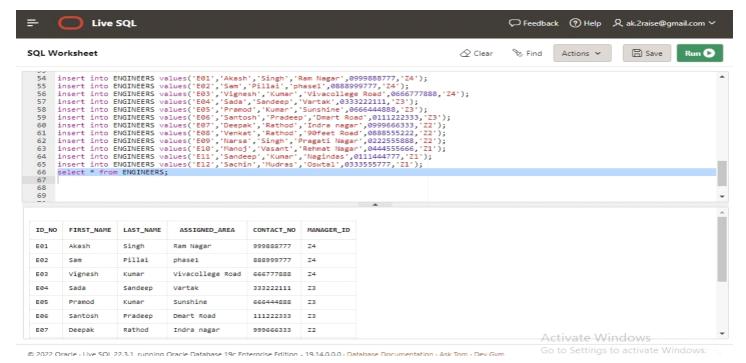
OLT Table

```
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');
```



ENGINEERS Table

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 Table

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 CUSTOMERS

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');

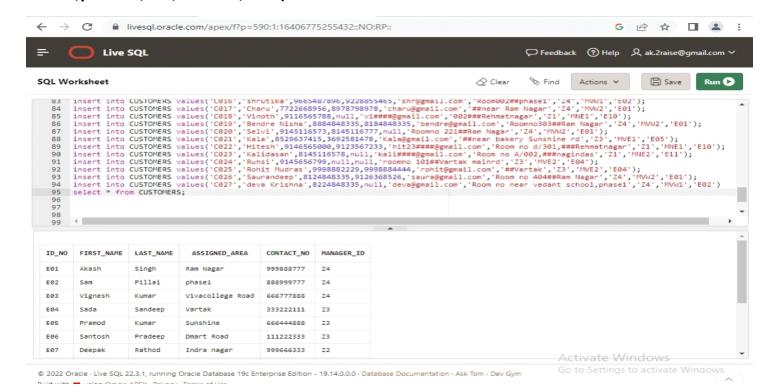
insert into CUSTOMERS values('C024','Ruhsi',9145656799,null,null,'roomno 101##Vartak mainrd','Z3','MVE2','E04');

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');

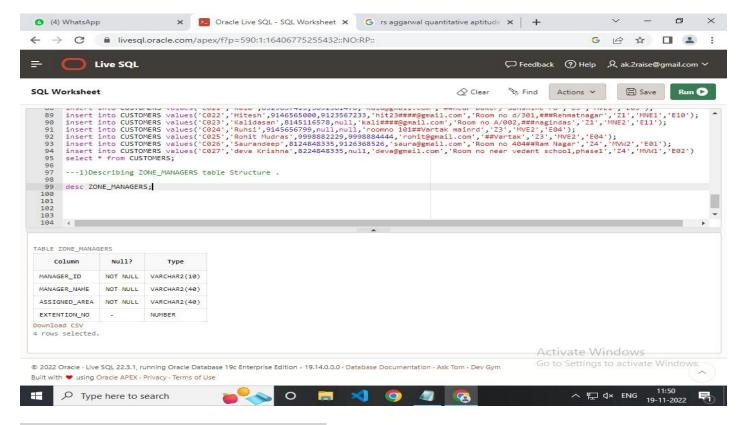
insert into CUSTOMERS values('C027','deva Krishna',8224848335,null,'deva@gmail.com','Room no near vedant school,phase1','Z4','MVW1','E02')



Performed Following Conditions:-

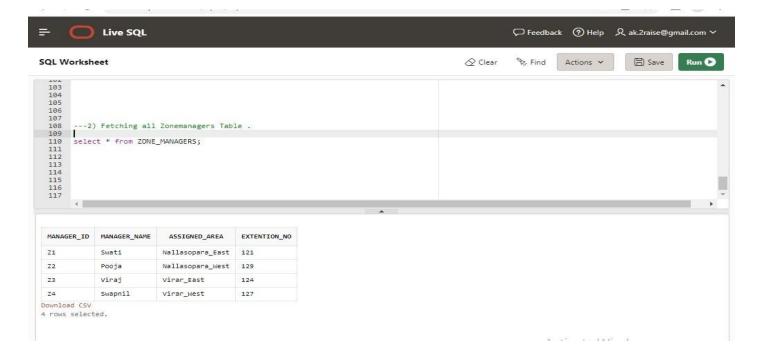
Q1 .Describe ZONE_MANAGERS table Structure?

→ Desc ZONE_MANAGERS;



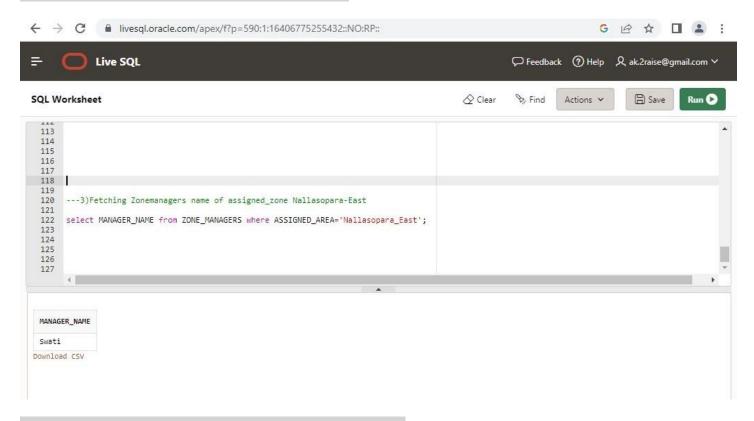
Q2. Fetch all Zone managers Table?

→ Select * from ZONE_MANAGERS;



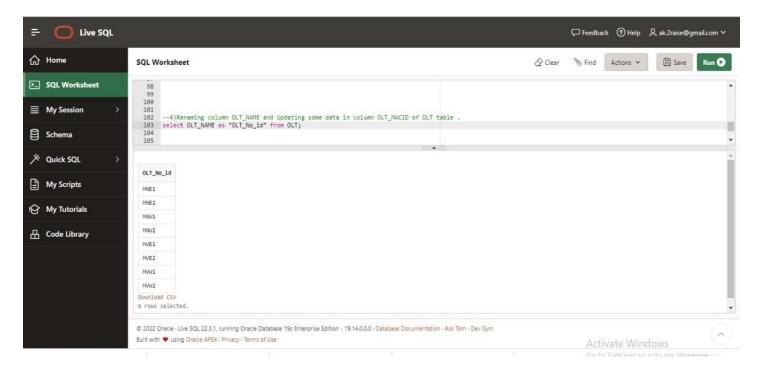
Q3. Fetch Zone managers names of assigned zone of Nallasopara East?

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



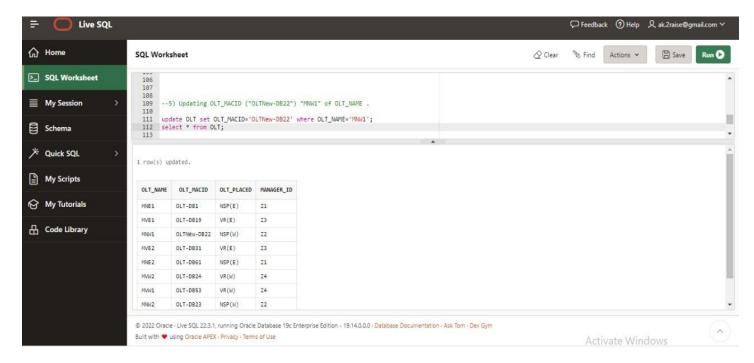
Q4. Rename column OLT_NAME temporary?

→ Select OLT_NAME as OLT_No_id from OLT;



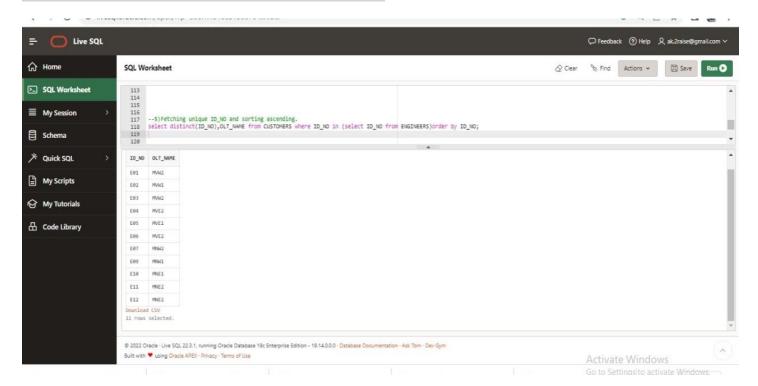
Q5. Update OLT MACID ("OLTNew-DB22") "MNW1" of OLT NAME?

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



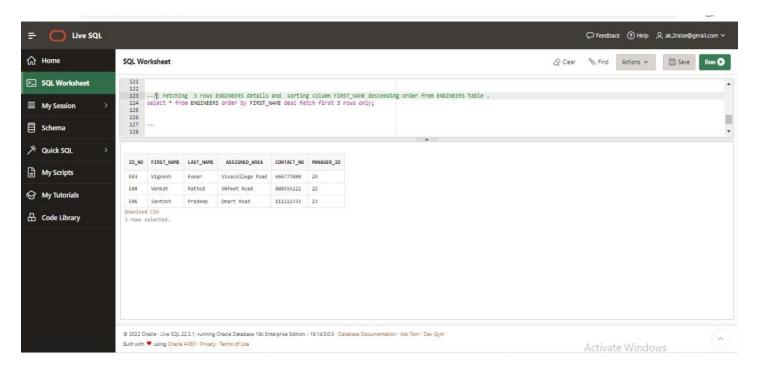
Q6. Fetch unique ID_NO and sort in ascending order?

→select distinct(ID_NO),OLT_NAME from CUSTOMERS where ID_NO in (select ID_NO from ENGINEERS)order by ID_NO;



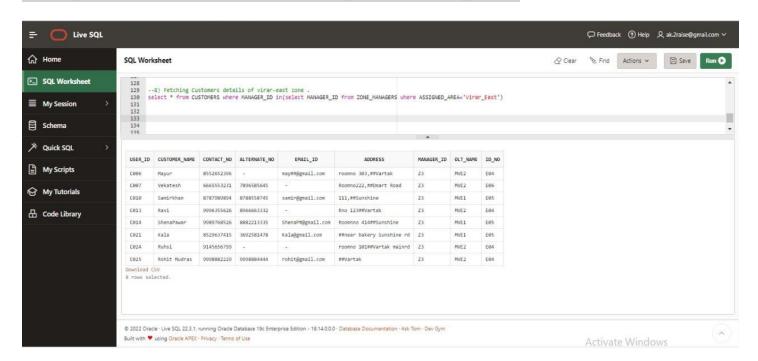
Q7. Fetch only 3 rows ENGINEERS details and sort column FIRST_NAME descending order from ENGINEERS table?

→ Select * from ENGINEERS order by FIRST_NAME desc fetch first 3 rows only;



Q8. Fetch Customers details of virar-east zone?

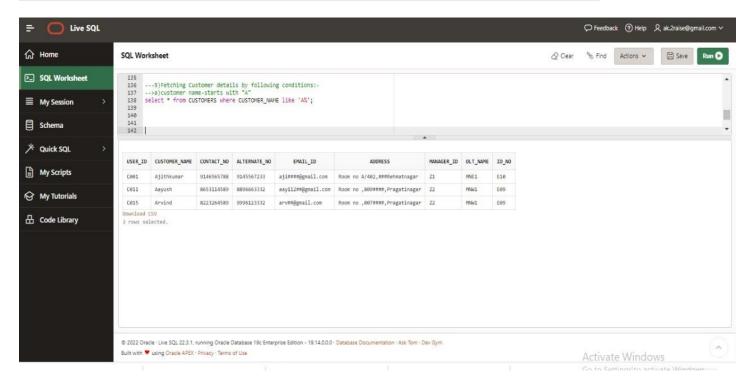
→select * from CUSTOMERS where MANAGER_ID in(select MANAGER_ID from ZONE_MANAGERS where ASSIGNED_AREA='Virar_East')



Q9. Fetch Customer details by following conditions:-

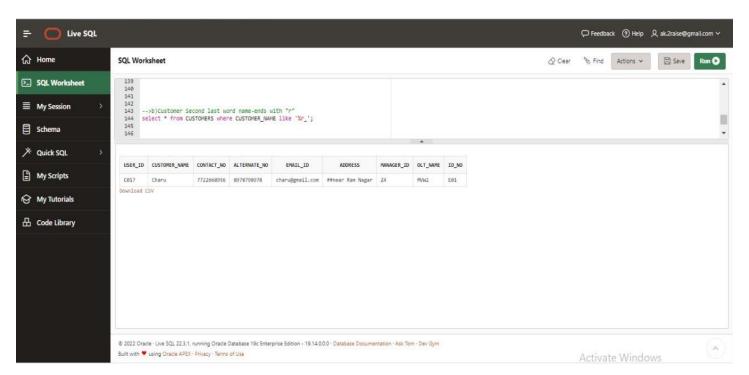
9a) Customer name-starts with "A"?

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



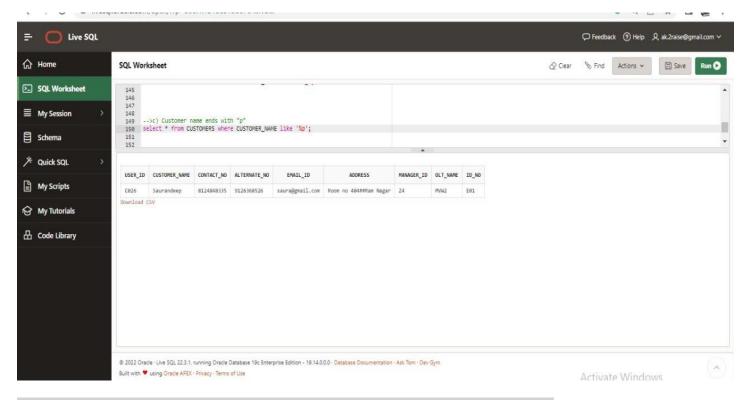
9b) Customer Second last word name-ends with "r"?

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



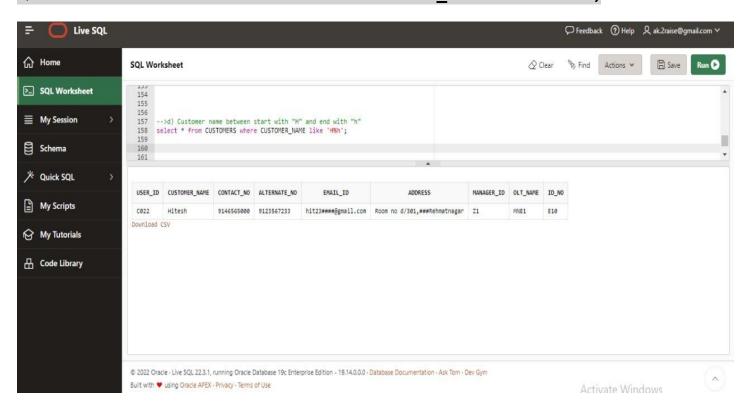
9c) Customer name ends with "p"?

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



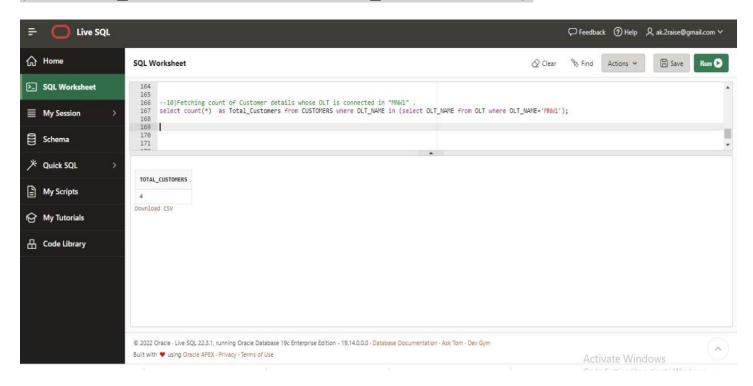
9d) Customer name between start with "H" and end with "h"?

→ Select * from CUSTOMERS where CUSTOMER_NAME like 'H%h';



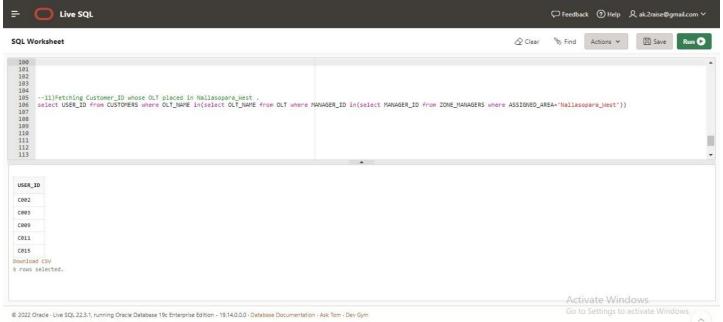
Q10. Fetch count of Customer details whose OLT is connected in "MNW1"?

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



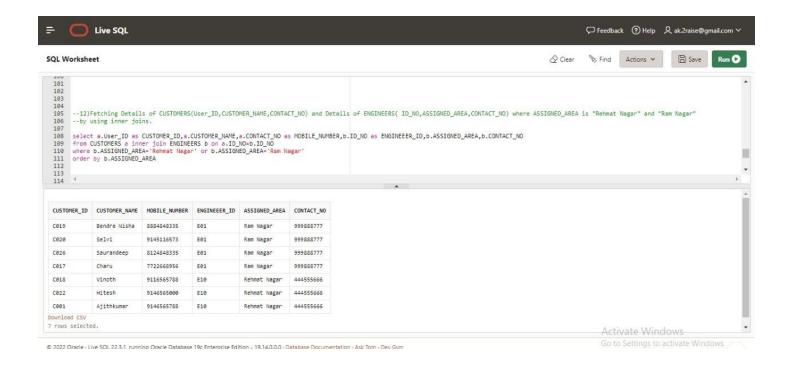
Q11) Fetch Customer ID whose OLT placed in Nallasopara West?

→ 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"))**



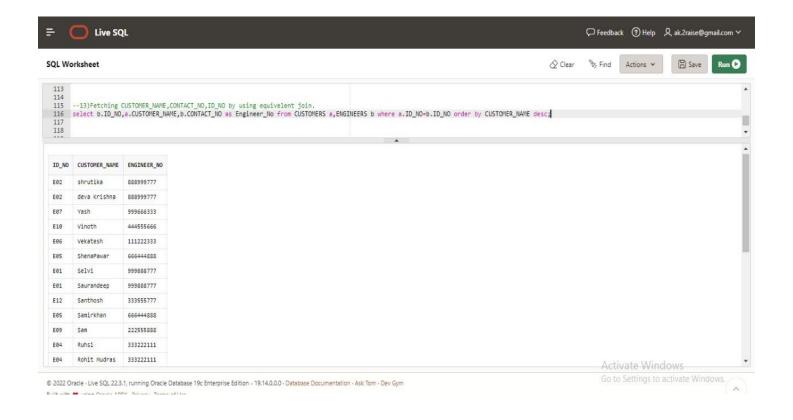
Q12) Fetch details of CUSTOMERS(User_ID,CUSTOMER_NAME,CONTACT_NO) and details of ENGINEERS(ID_NO,ASSIGNED_AREA,CONTACT_NO), where ASSIGNED_AREA is "Rehmat Nagar" and "Ram Nagar" by using inner joins.

→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



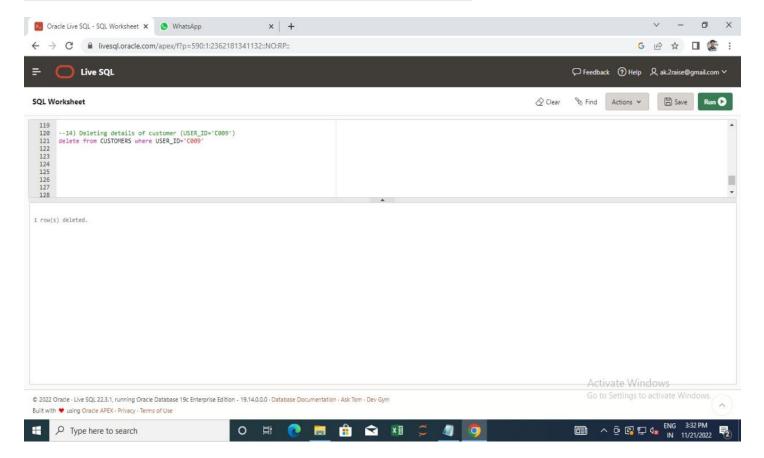
Q13) Fetch CUSTOMER_NAME, CONTACT_NO, ID_NO by using equivelent join?

→ 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;



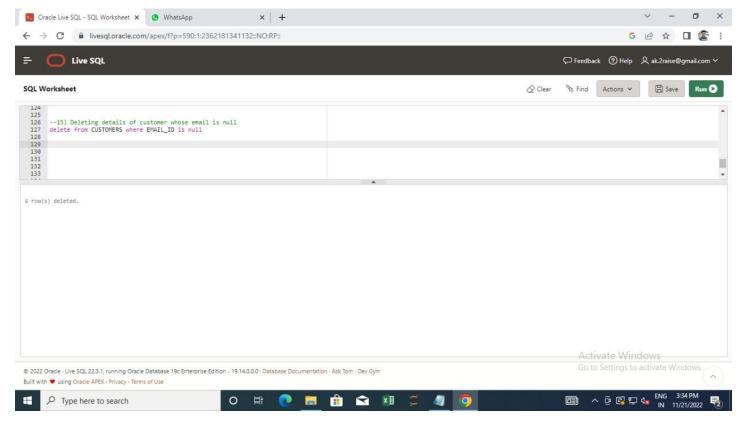
Q14) Delete details of customer (USER_ID='C009')?

→ Delete from CUSTOMERS where USER_ID='C009'



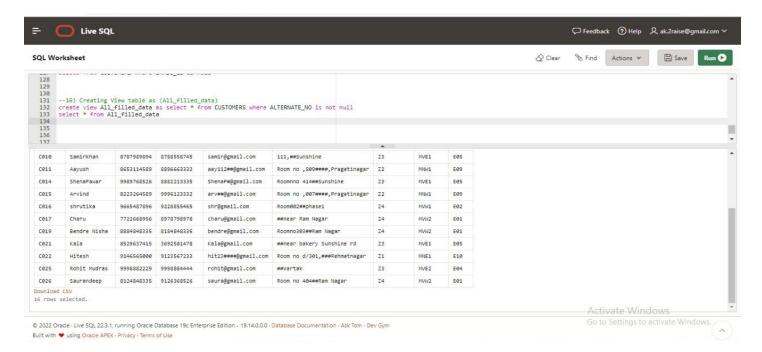
Q15) Delete details of customer whose email is NULL?

→ Delete from CUSTOMERS where EMAIL_ID is null



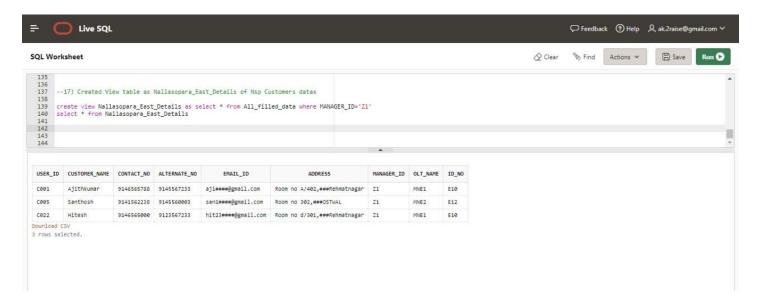
Q16) Create View table as (All filled data)?

→Create view All_filled_data as select * from CUSTOMERS where ALTERNATE_NO is not null select * from All_filled_data



Q17) Create View table as Nallasopara East Details of Nsp Customers data?

→ Create view Nallasopara_East_Details as select * from All_filled_data where MANAGER_ID='Z1' select * from Nallasopara_East_Details



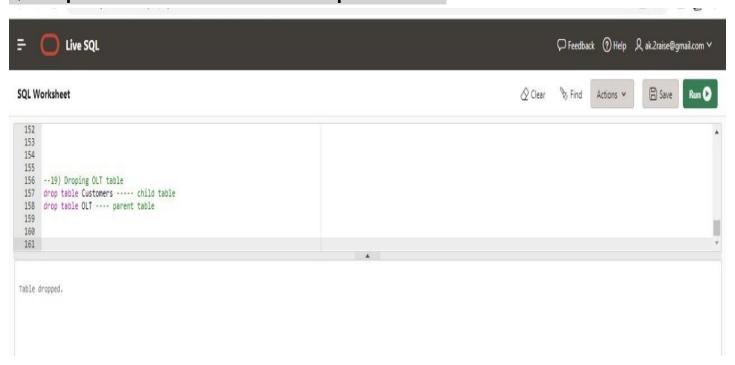
Q18) Truncate the Customers details?

→Truncate table Customers



Q19) Drop OLT table?

→ Drop table Customers ---- child table→ Drop table OLT ---- parent table



Q20) Drop Zone Manager table?

