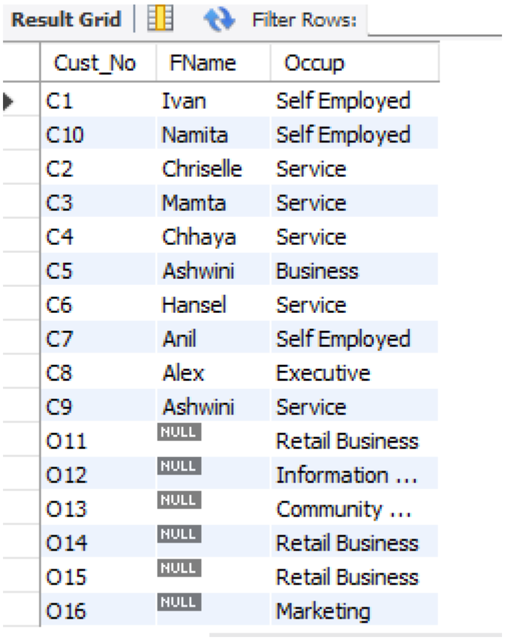
Lab Assignment 7

Program 1. Create a view (Columns: CustNo, Full Name, and Occupation) called Customers on the CUST_MSTR.

Source Code:

```
CREATE VIEW CUSTOMERS AS SELECT Cust_No, FName , Occup FROM
CUST_MSTR;

SELECT *FROM CUSTOMERS;
```

OUTPUT:

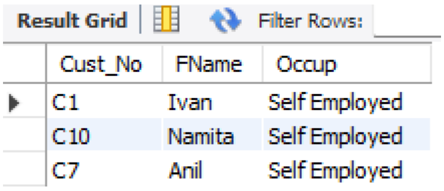


Cust_No	FName	Occup
C1	Ivan	Self Employed
C10	Namita	Self Employed
C2	Chriselle	Service
C3	Mamta	Service
C4	Chhaya	Service
C5	Ashwini	Business
C6	Hansel	Service
C7	Anil	Self Employed
C8	Alex	Executive
C9	Ashwini	Service
O11	NULL	Retail Business
O12	NULL	Information ...
O13	NULL	Community ...
O14	NULL	Retail Business
O15	NULL	Retail Business
O16	NULL	Marketing

-- list the names of the self-employed customers.

```
SELECT * FROM CUSTOMERS WHERE OCCUP = "Self employed";
```

OUTPUT:

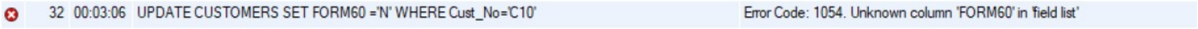


Cust_No	FName	Occup
C1	Ivan	Self Employed
C10	Namita	Self Employed
C7	Anil	Self Employed

-- Change the Form60 to 'N' where CustNo is 'c10'. and see it is removed from the existing table Cust_mstr.

UPDATE CUSTOMERS SET FORM60 ='N' WHERE Cust_No='C10';

OUTPUT:



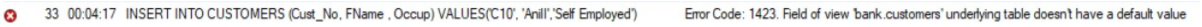
```
32  00:03:06  UPDATE CUSTOMERS SET FORM60 ='N' WHERE Cust_No='C10'    Error Code: 1054. Unknown column 'FORM60' in 'field list'
```

-- Insert a new row in the table and see if there is a change in the existing table.

INSERT INTO CUSTOMERS (Cust_No, FName , Occup)

VALUES('C10', 'AnilI','Self Employed');

OUTPUT:



```
33  00:04:17  INSERT INTO CUSTOMERS (Cust_No, FName , Occup) VALUES('C10', 'Anill','Self Employed')    Error Code: 1423. Field of view 'bank.customers' underlying table doesn't have a default value
```

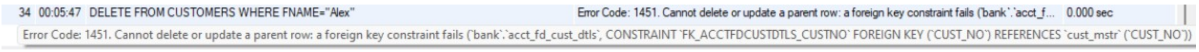
-- Remove the records of the customer whose Fname =' Alex' and see it is removed from the

-- existing table Cust_mstr.

DELETE FROM CUSTOMERS

WHERE FNAME="Alex";

OUTPUT:



```
34  00:05:47  DELETE FROM CUSTOMERS WHERE FNAME="Alex"    Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails ('bank'.'acct_f...   0.000 sec
Error Code: 1451. Cannot delete or update a parent row: a foreign key constraint fails ('bank'.'acct_fd_cust_dtls', CONSTRAINT 'FK_ACCTFDCUSTDTLS_CUSTNO' FOREIGN KEY ('CUST_NO') REFERENCES 'cust_mstr' ('CUST_NO'))
```

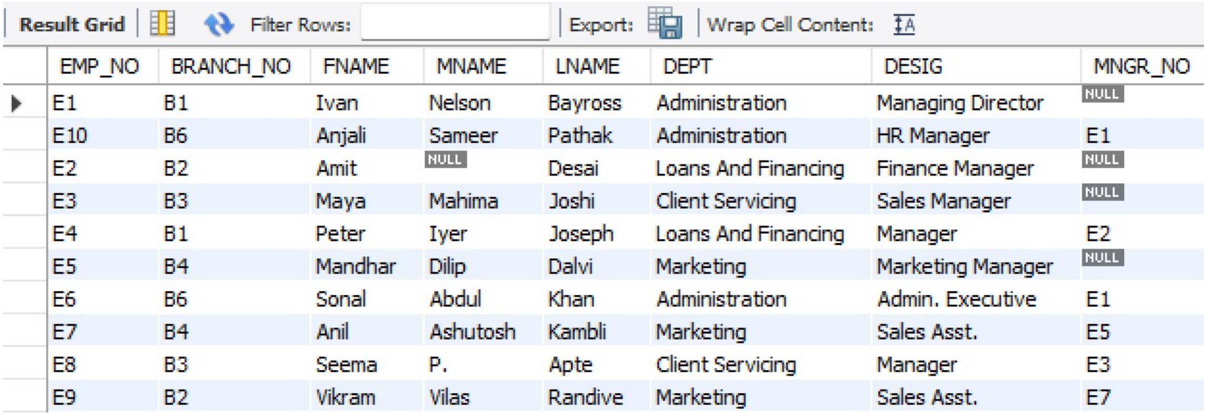
Program 2. Create a view called Employees on the EMP_MSTR table. And perform the following queries:

Source Code:

-- List the structure as similar as the existing table.

```
CREATE VIEW Employees AS SELECT EMP_NO, BRANCH_NO, FNAME, MNAME, LNAME, DEPT, DESIG, MNGR_NO FROM EMP_MSTR;
```

OUTPUT:

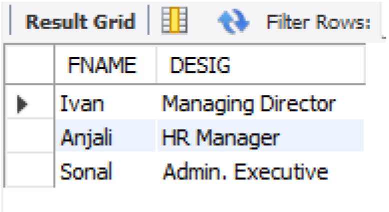


EMP_NO	BRANCH_NO	FNAME	MNAME	LNAME	DEPT	DESIG	MNGR_NO
E1	B1	Ivan	Nelson	Bayross	Administration	Managing Director	NULL
E10	B6	Anjali	Sameer	Pathak	Administration	HR Manager	E1
E2	B2	Amit	NULL	Desai	Loans And Financing	Finance Manager	NULL
E3	B3	Maya	Mahima	Joshi	Client Servicing	Sales Manager	NULL
E4	B1	Peter	Iyer	Joseph	Loans And Financing	Manager	E2
E5	B4	Mandhar	Dilip	Dalvi	Marketing	Marketing Manager	NULL
E6	B6	Sonal	Abdul	Khan	Administration	Admin. Executive	E1
E7	B4	Anil	Ashutosh	Kambli	Marketing	Sales Asst.	E5
E8	B3	Seema	P.	Apte	Client Servicing	Manager	E3
E9	B2	Vikram	Vilas	Randive	Marketing	Sales Asst.	E7

-- List Name and Desig where DeptNo =' Administration'.

```
SELECT FNAME,DESIG FROM Employees

WHERE DEPT='Administration';
```

OUTPUT:



FNAME	DESIG
Ivan	Managing Director
Anjali	HR Manager
Sonal	Admin. Executive

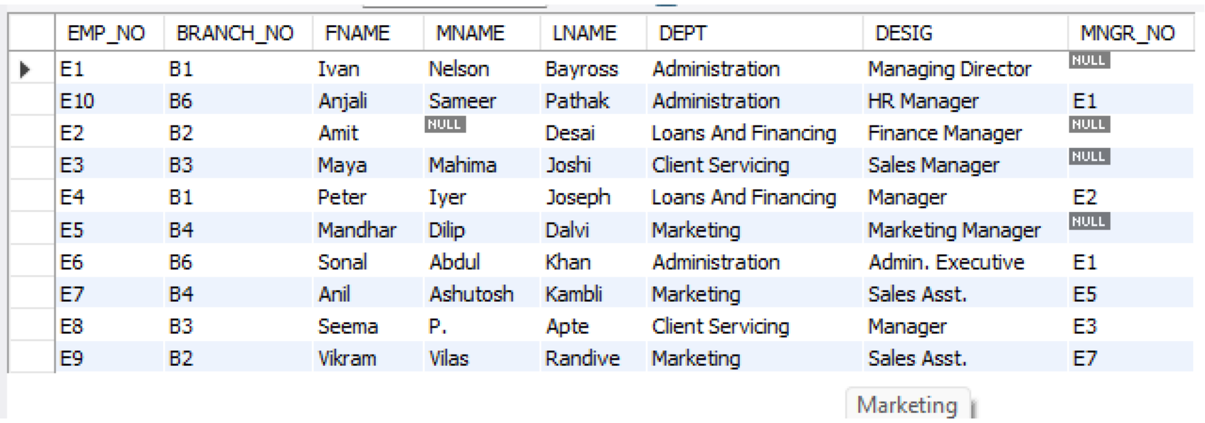
-- Change to 'Manager' where Desig =' Clerk' and see how it reflects the

-- original table.

```
UPDATE Employees SET DESIG ='Manager' WHERE Desig ='Clerk';

SELECT *FROM Employees;

SELECT *FROM Emp_mstr;
```

-- yes , changes also appeares in base table

OUTPUT:

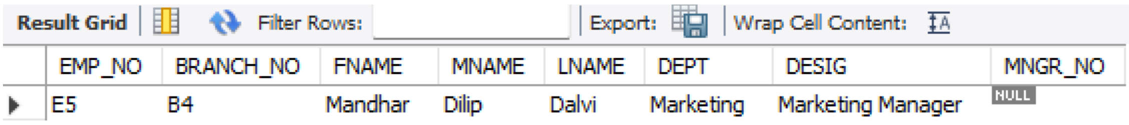


EMP_NO	BRANCH_NO	FNAME	MNAME	LNAME	DEPT	DESIG	MNGR_NO
E1	B1	Ivan	Nelson	Bayross	Administration	Managing Director	NULL
E10	B6	Anjali	Sameer	Pathak	Administration	HR Manager	E1
E2	B2	Amit	NULL	Desai	Loans And Financing	Finance Manager	NULL
E3	B3	Maya	Mahima	Joshi	Client Servicing	Sales Manager	NULL
E4	B1	Peter	Iyer	Joseph	Loans And Financing	Manager	E2
E5	B4	Mandhar	Dilip	Dalvi	Marketing	Marketing Manager	NULL
E6	B6	Sonal	Abdul	Khan	Administration	Admin. Executive	E1
E7	B4	Anil	Ashutosh	Kambli	Marketing	Sales Asst.	E5
E8	B3	Seema	P.	Apte	Client Servicing	Manager	E3
E9	B2	Vikram	Vilas	Randive	Marketing	Sales Asst.	E7

-- show the employees whose name starts from 'M' and present in 'Marketing.

```
SELECT * FROM employees

WHERE FNAME LIKE 'M%' AND depT = 'Marketing';
```

OUTPUT:



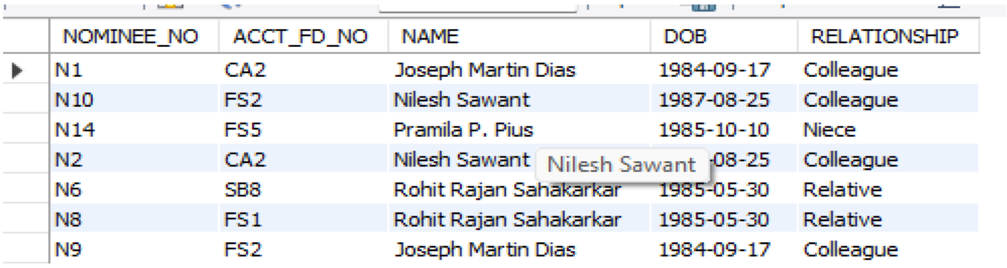
EMP_NO	BRANCH_NO	FNAME	MNAME	LNAME	DEPT	DESIG	MNGR_NO
E5	B4	Mandhar	Dilip	Dalvi	Marketing	Marketing Manager	NULL

Program 3. Print the Name, Relationship of the Nominees from the view created, where DOB is greater than the year 1980.

Source Code:

```
CREATE VIEW Nominees AS SELECT NOMINEE_NO, ACCT_FD_NO, NAME, DOB,
RELATIONSHIP FROM NOMINEE_MSTR;

SELECT *FROM Nominees

WHERE EXTRACT(YEAR FROM DOB) > 1980;
```

OUTPUT:



NOMINEE_NO	ACCT_FD_NO	NAME	DOB	RELATIONSHIP
N1	CA2	Joseph Martin Dias	1984-09-17	Colleague
N10	FS2	Nilesh Sawant	1987-08-25	Colleague
N14	FS5	Pramila P. Pius	1985-10-10	Niece
N2	CA2	Nilesh Sawant	-08-25	Colleague
N6	SB8	Rohit Rajan Sahakarkar	1985-05-30	Relative
N8	FS1	Rohit Rajan Sahakarkar	1985-05-30	Relative
N9	FS2	Joseph Martin Dias	1984-09-17	Colleague

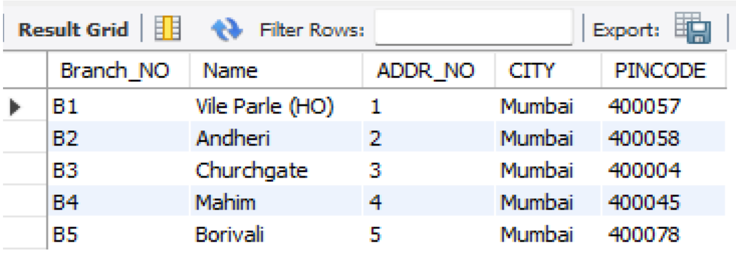
Program 4. View on Multiple tables:

- Create a Master/Detail View from the tables given below. And also perform the following queries:
- Show BranchNo, Name, ADDR_NO, CITY, and PINCODE as a view where City is Like ‘M%.

Source Code:

```
CREATE VIEW Master AS

SELECT Branch_NO, Name, ADDR_NO, CITY, PINCODE

FROM BRANCH_MSTR

JOIN ADDR_DTLS ON BRANCH_MSTR.Branch_No = ADDR_DTLS.CODE_NO

WHERE ADDR_DTLS.CITY  LIKE 'M%';

SELECT *FROM MASTER;
```

OUTPUT:



Branch_NO	Name	ADDR_NO	CITY	PINCODE
B1	Vile Parle (HO)	1	Mumbai	400057
B2	Andheri	2	Mumbai	400058
B3	Churchgate	3	Mumbai	400004
B4	Mahim	4	Mumbai	400045
B5	Borivali	5	Mumbai	400078

- Delete the record from the view where BRANCH_NO = ‘B5’ from the view created on BRANCH_MSTR and see if the particular row is deleted from the original table or not.

Source Code:

DELETE FROM Master WHERE Branch_NO = 'B5';

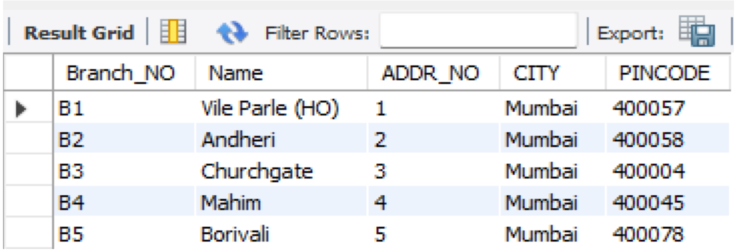
--Cannot be Deleted—

- List the Branch No, Name, and Complete Address where CITY =’ Mumbai’.

Source Code:

SELECT * FROM MASTER WHERE CITY = 'Mumbai';

OUTPUT:



Branch_NO	Name	ADDR_NO	CITY	PINCODE
B1	Vile Parle (HO)	1	Mumbai	400057
B2	Andheri	2	Mumbai	400058
B3	Churchgate	3	Mumbai	400004
B4	Mahim	4	Mumbai	400045
B5	Borivali	5	Mumbai	400078

- Insert a new row containing City = ‘Delhi’ in the view and compare the results with the existing table.

Source Code:

INSERT INTO MASTER (Branch_NO, Name, ADDR_NO, CITY, PINCODE)

VALUES ('B1','RAMAMANDI',4,'DELHI',400054);

Program 5. Destroy a View created on CUST_MSTR from the database.

Source Code:

```
DROP VIEW CUSTOMERS;
```

--cannot directly insert rows into a view gives ERROR—

Program 5. Destroy a View created on CUST_MSTR from the database.

Source Code:

```
DROP VIEW CUSTOMERS;
```

Program 6. Using Indexes:

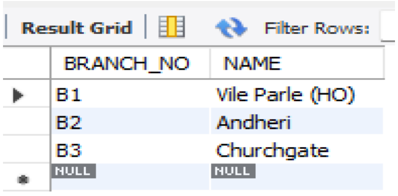
1. Create a simple index on the VERI_EMP_NO column of the ACCT_MSTR table.
2. Create a composite index on the TRANS_MSTR table on columns TRANS_NO and ACCT_NO.
3. Create a unique index on the CUST_NO column of the CUST_MSTR table.
4. Create a reverse index on the CUST_NO column of the CUST_MSTR table.
5. Create a bitmap index on the TRANS_NO column of the TRANS_MSTR table.
6. Remove index idX_CustNo created for the table CUST_MSTR.
7. Retrieve the first three rows from the BRANCH_MSTR table using ROWNUM.

Source Code:

```
   --1
CREATE INDEX idx_veri_emp_no ON ACCT_MSTR (VERI_EMP_NO);
   --2
CREATE INDEX idx_trans_acct ON TRANS_MSTR (TRANS_NO, ACCT_NO);
   --3
CREATE UNIQUE INDEX idx_cust_no ON CUST_MSTR (CUST_NO);
   --4
CREATE INDEX idx_cust_no_reverse ON CUST_MSTR (CUST_NO DESC);
   --5
CREATE BITMAP INDEX idx_trans_no ON TRANS_MSTR (TRANS_NO);
   --6
DROP INDEX idx_cust_no ON CUST_MSTR;
```

```
   --7
SELECT *
FROM BRANCH_MSTR
LIMIT 3;
```

OUTPUT:



	BRANCH_NO	NAME
▶	B1	Vile Parle (HO)
	B2	Andheri
	B3	Churchgate
✱	NULL	NULL