

# Assignment: SQL Day-1

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## **DDL (Data Definition Language):**

```
CREATE TABLE LMS_CUSTOMER_M_kushmakar(  
Customer_ID VARCHAR(20) NOT NULL,  
First_Name VARCHAR(20) NOT NULL,  
Last_Name VARCHAR(20),  
Gender VARCHAR(1) NOT NULL,  
Date_Of_Birth DATE NOT NULL,  
Contact_Number VARCHAR(10) NOT NULL,  
Email_Address VARCHAR(40) NOT NULL,  
Monthly_Income NUMBER(8,2) NOT NULL,  
Profession VARCHAR(40),  
Total_Monthly_Expense NUMBER(8,2) NOT NULL,  
Designation VARCHAR(40),  
Company_Name VARCHAR(40)  
);  
SELECT * FROM LMS_CUSTOMER_M_kushmakar;
```

CUSTOME...	FIRST...	LAST_NAME	GENDER	DATE_OF...	CONTACT...	EMAIL_A...	MONTHLY...	PROFESSI...	TOTAL_M...	DESIGNA...	COMPANY...
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--2. Create the table LoanProductCategory based on the following instance chart.

```
CREATE TABLE LMS_PRODUCT_CATEGORY_M_kushmakar(  
category_ID VARCHAR(10) NOT NULL,  
Category_Name VARCHAR(50) NOT NULL,  
Asset_Based VARCHAR (1) NOT NULL check(Asset_based IN('Y','N'))),
```

```
Description VARCHAR(150),
SecuredLoan VARCHAR(2) NOT NULL, check(securedLoan in('S','US'))

);
```

***SELECT \* FROM LMS\_PRODUCT\_CATEGORY\_M\_kushmakar;***

CATEGOR...	CATEGOR...	ASSET_B...	DESCRIPT...	SECURED...
------------	------------	------------	-------------	------------

**--3. Create the table LoanProduct based on the following instance chart.**

```
CREATE TABLE LMS_Product_M_kushmakar(
Product_Code VARCHAR(20) NOT NULL,
Product_Name VARCHAR(100) NOT NULL,
Product_Description VARCHAR(200),
Product_Category VARCHAR(10) NOT NULL,
Max_Tenure Number(2),
Min_Tenure Number(2)
);
```

***SELECT \* FROM LMS\_Product\_M\_kushmakar;***

PRODUCT...	PRODUCT...	PRODUCT...	PRODUCT...	MAX_TEN...	MIN_TEN...
------------	------------	------------	------------	------------	------------

**--4 Create the table Loan\_Agreement based on the following instance chart.**

```
CREATE TABLE LMS_AGREEMENT_DTL_kushmakar(
Agreement_ID VARCHAR(20) NOT NULL,
Lessee_ID VARCHAR(100) NOT NULL,
Tenure Number(2),
ROI NUMBER(3,1),
Loan_Amount NUMBER(10,2),
```

```

Repayment_Frequency VARCHAR(2),
Loan_Disbursal_Date DATE,
Status VARCHAR(10),
Product_Code VARCHAR(20) NOT NULL,
Constraint chk1234Kush check(Repayment_Frequency IN('M','Y','Q','HY')),
Constraint chk12345Kush check(Status IN('Pending','Approved','Rejected','Active','Closed'))
);

```

AGREEME...	LESSEE_ID	TENURE	ROI	LOAN_AM...	REPAYME...	LOAN_DI...	STATUS	PRODUCT...
------------	-----------	--------	-----	------------	------------	------------	--------	------------

```
SELECT * FROM LMS_AGREEMENT_DTL_kushmakar;
```

#### **--5. Create the table EMI\_Schedule**

```

CREATE TABLE LMS_REPAYSCH_DTL_kushmakar(
Agreement_id Varchar(20)NOT NULL,
PropInstID Number(8) GENERATED BY DEFAULT AS IDENTITY,
Installment_Amount Number(8,2)NOT NULL,
Installment_Number Number(3) NOT NULL,
Principal_Component Number(8,2) NOT NULL,
Interest_ComponentNumber Number(8,2) NOT NULL,
Balance_Principal_Amount Number(8,2)NOT NULL,
Penalty_Charges Number(8,2),
Installment_Due_Date Date NOT NULL
);

```

```
SELECT * FROM LMS_REPAYSCH_DTL_kushmakar;
```

#### **--6. Create the table Transaction\_Type.**

```
CREATE TABLE LMS_TXNTYPE_M_kushmakar(
```

```
Txn_Type VARCHAR(20) Not Null,
Description VARCHAR(100),
Constraint chk12345Kush1 check(Txn_Type IN('Installment', 'LPP '))
);
```

TXN_TYPE	DESCRIPT...
----------	-------------

```
SELECT * FROM LMS_TXNTYPE_M_kushmakar;
```

#### --7. Create the table Advice.

```
CREATE TABLE LMS_TXN_ADVICE_DTL_kushmakar(
Txn_Advice_ID Number(8) GENERATED BY DEFAULT AS IDENTITY,
Adviceamt Number(8,2) Not Null,
AdviceDate Date Not Null,
Case_Id Varchar(20),
TxnID Number(8) Not Null,
TxnType Varchar(20) Not Null
);
```

```
SELECT * FROM LMS_TXN_ADVICE_DTL_kushmakar;
```

TXN_ADV...	ADVICEAMT	ADVISED...	CASE_ID	TXNID	TXNTYPE
------------	-----------	------------	---------	-------	---------

#### --8. Create the table Payment.

```
CREATE TABLE LMS_CHEQUE_DTL_kushmakar(
Cheque_Id NUMBER(8) GENERATED BY DEFAULT AS IDENTITY,
Payment_Mode VARCHAR(1) NOT NULL,
Cheque_Num VARCHAR(50) NOT NULL,
Cheque_Date DATE,
Cheque_Amount NUMBER(10,2), Drawn_On_Bank VARCHAR(50),
```



dd2.pdf

```
Deposit_Date DATE,  
Status VARCHAR(1)  
check(Status IN('C','D','X','R')),  
check(Cheque_Num IN('Instrument')),  
check(Payment_Mode IN('C','Q','D','T'))  
);  
SELECT * FROM LMS_CHEQUE_DTL_kushmakar;
```

**--9. Create the table Receipt\_Allocation.**

```
CREATE TABLE LMS_PAYMENT_DTL_kushmakar(  
Payment_ID Number(8) unique not null,  
Cheque_ID Number(8) unique not null,  
Payment_Date Date NOT NULL,  
Status Varchar(1) NOT NULL check(Status IN('c','N')),  
Txn_Advice_Id Number(8)NOT NULL  
);
```

**10. select table\_name from user\_tables;**

**11. Alter the tables to add the primary key as per the below given chart Primary Key Reference Name**

**Table Name Column Name:-**

```
ALTER TABLE LMS_CUSTOMER_M00  
ADD CONSTRAINT LMS_CUSTOMER_M00_PK PRIMARY KEY (Customer_ID);
```

```
ALTER TABLE LMS_PRODUCT_CATEGORY_M_kushmakar  
ADD CONSTRAINT LMS_PRODUCT_CAT_M_kushmakar_PK PRIMARY KEY (Category_ID);
```

```
ALTER TABLE LMS_PRODUCT_M_kushmakar
```

ADD CONSTRAINT LMS\_PRODUCT\_M\_kushmakar\_PK PRIMARY KEY (Product\_Code);

ALTER TABLE LMS\_AGREEMENT\_DTL\_kushmakar

ADD CONSTRAINT LMS\_AGREEMENT\_DTL\_kushmakar\_PK PRIMARY KEY (Agreement\_ID);

ALTER TABLE LMS\_REPAYSCH\_DTL\_kushmakar

ADD CONSTRAINT LMS\_REPAYSCH\_DTL\_kushmakar\_PK PRIMARY KEY (PropInstID);

ALTER TABLE LMS\_TXN\_ADVICE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_TXNTYPE\_M\_kushmakar\_PK PRIMARY KEY (TxnType);

ALTER TABLE LMS\_TXN\_ADVICE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_TXN\_ADVICE\_DTL\_kushmakar\_PK PRIMARY KEY (Txn\_Advice\_ID);

ALTER TABLE LMS\_CHEQUE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_CHEQUE\_DTL\_kushmakar\_PK PRIMARY KEY (Cheque\_ID);

ALTER TABLE LMS\_PAYMENT\_DTL\_kushmakar

ADD CONSTRAINT LMS\_PAYMENT\_DTL\_kushmaka\_PK PRIMARY KEY (Payment\_ID);

## **--12. Alter the tables to add the foreign keys as per the below given chart**

Alter table LMS\_Product\_M\_kushmakar

ADD CONSTRAINT LMS\_Product\_Cat\_FK\_kushmakar

FOREIGN KEY (Product\_Category) REFERENCES LMS\_Product\_Category\_M\_kushmakar (Category\_ID);

Alter table LMS\_Agreement\_DTL\_kushmakar

ADD CONSTRAINT LMS\_Agreement\_Dtl\_FK1\_kushmakar

FOREIGN KEY (Lessee\_ID) REFERENCES LMS\_Customer\_M\_kushmakar (Customer\_ID);

Alter table LMS\_Agreement\_DTL\_kushmakar

ADD CONSTRAINT LMS\_Agreement\_Dtl\_FK2\_kushmakar

FOREIGN KEY (Product\_Code) REFERENCES LMS\_Product\_M\_kushmakar (Product\_Code);

Alter table LMS\_Repaysch\_DTL\_kushmakar

ADD CONSTRAINT LMS\_Repaysch\_DTL\_FK\_kushmakar

FOREIGN KEY (Agreement\_Id) REFERENCES LMS\_Agreement\_DTL\_kushmakar (Agreement\_Id);

Alter table LMS\_TXN\_ADVICE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_TXN\_ADVICE\_DTL\_FK1\_kushmakar

FOREIGN KEY (TxnType) REFERENCES LMS\_TXNTYPE\_M\_kushmakar (Txn\_Type);

Alter table LMS\_TXN\_ADVICE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_TXN\_ADVICE\_DTL\_FK2\_kushmakar

FOREIGN KEY (Case\_Id) REFERENCES LMS\_AGREEMENT\_DTL\_kushmakar (Agreement\_id);

Alter table LMS\_TXN\_ADVICE\_DTL\_kushmakar

ADD CONSTRAINT LMS\_TXN\_ADVICE\_DTL\_FK3\_kushmakar

FOREIGN KEY (TxnId) REFERENCES LMS\_REPAYSCH\_DTL\_kushmakar (PropInstID);

Alter table LMS\_PAYMENT\_DTL\_kushmakar

ADD CONSTRAINT LMS\_Payment\_Dtl\_FK1\_kushmakar

FOREIGN KEY (Cheque\_Id) REFERENCES LMS\_CHEQUE\_DTL\_kushmakar(Cheque\_id);

Alter table LMS\_PAYMENT\_DTL\_kushmakar

ADD CONSTRAINT LMS\_Payment\_Dtl\_FK2\_kushmakar

FOREIGN KEY (Txn\_Advice\_Id) REFERENCES LMS\_TXN\_ADVICE\_DTL\_kushmakar(Txn\_Advice\_id);

**--13. Modify the Customer table to allow for longer Customer Last Names. Confirm your modification.**

```
ALTER TABLE LMS_CUSTOMER_M00 MODIFY last_Name VARCHAR(30) NOT NULL;
```

**--14. Create the table Customer2 based on the structure of Customer table. Include only the Customer\_id, first\_name, email\_address, profession, monthlyIncome. Name the columns in your new table as ID, NAME, EMAIL, PROFESSION, INCOME.**

```
CREATE TABLE CUSTOMER_kushmakar(  
ID VARCHAR(20)NOT NULL,  
NAME VARCHAR(20)NOT NULL,  
EMAIL VARCHAR(40)NOT NULL,  
PROFESSION VARCHAR(40),  
INCOME NUMBER(8,2)  
);
```

ID	NAME	EMAIL	PROFESSI...	INCOME
----	------	-------	-------------	--------

**--15. Drop the table Customer2;**

```
drop table CUSTOMER_kushmakar;
```

```
Table CUSTOMER_KUSHMAKAR dropped.
```

**--16. Query the recycle bin to see whether the table is present.**



```
SELECT *FROM RECYCLEBIN WHERE ORIGINAL_NAME ='CUSTOMER_kushmakar';
```

**--17. Undrop the table Customer2.**

```
FLASHBACK TABLE CUSTOMER_kushmakar TO BEFORE DROP;
```

**Flashback succeeded.**

**--18. Drop the column FIRST\_NAME from the Customer2 table. Confirm your modification by checking the description of the table.**

```
ALTER TABLE CUSTOMER_Kushmakar
```

```
DROP COLUMN NAME;
```

```
SELECT* FROM CUSTOMER_KUSHMAKAR;
```

## DML (Data Manipulation Language):

1. Create an INSERT statement to add the first row of the data in the Customer table being created. Do not list the columns in the INSERT Clause. Do not enter all rows yet.

```
INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C101', 'Amit', 'Gupta', 'M', to_date('10-Jan-88', 'DD-MON-RR'), 9876545678, 'amit.gupta@gmail.com', 50000, 'Service', 15000, 'Software Engineer', 'Nucleus');

Select * from LMS_customer_kushmakar;
```

Script Output x Query Result x

SQL | All Rows Fetched: 1 in 0.167 seconds

CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION	COMPANY_NAME
1 C101	Amit	Gupta	M	10-JAN-88	9876545678	amit.gupta@gmail.com	50000	Service	15000	Software Engineer	Nucleus

2. Populate the CUSTOMER table with the second row of sample data from the preceeding list. This time, list the columns explicitly in the INSERT clause

```
INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C102', 'Rekha', 'Arora', 'F', to_date('8-Aug-76', 'DD-MON-RR'), 9878974561, 'arekha@gmail.com', 100000, 'Service', 40000, 'Project Manager', 'TCS');

Select * from LMS_customer_kushmakar;
```

Script Output x Query Result x

SQL | All Rows Fetched: 2 in 0.008 seconds

CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION	COMPANY_NAME
1 C101	Amit	Gupta	M	10-JAN-88	9876545678	amit.gupta@gmail.com	50000	Service	15000	Software Engineer	Nucleus
2 C102	Rekha	Arora	F	08-AUG-76	9878974561	arekha@gmail.com	100000	Service	40000	Project Manager	TCS

- 3) Confirm your addition to the table.

```
INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C102', 'Rekha', 'Arora', 'F', to_date('8-Aug-76', 'DD-MON-RR'), 9878974561, 'arekha@gmail.com', 100000, 'Service', 40000, 'Project Manager', 'TCS');

Select * from LMS_customer_kushmakar;
```

Script Output x Query Result x

SQL | All Rows Fetched: 2 in 0.008 seconds

CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION	COMPANY_NAME
1 C101	Amit	Gupta	M	10-JAN-88	9876545678	amit.gupta@gmail.com	50000	Service	15000	Software Engineer	Nucleus
2 C102	Rekha	Arora	F	08-AUG-76	9878974561	arekha@gmail.com	100000	Service	40000	Project Manager	TCS

4) Write an insert statement in a dynamic reusable script file named loadcust.sql to load rows into the CUSTOMER table. Save this script to a file named lab\_01\_04.sql.

```
INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C130', 'Anaya', 'Grewal', 'F', to_date('7-Apr-84', 'DD-MON-RR'), 6789432123, 'anaya.grewal@gmail.com', 40000, 'Service', 30000, 'HR Executive', 'IBM');
```

Script Output x  
Task completed in 0.043 seconds

1 row inserted.

5) Populate the table with the next 10 rows of sample data by running the insert statement in the script that you created in Step 4.

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION
1	C101	Amit	Gupta	M	10-JAN-88	9876545678	amit.gupta@gmail.com	50000	Service	15000	Software Engineer
2	C102	Rekha	Arora	F	08-AUG-76	9878974561	arekha@gmail.com	100000	Service	40000	Project Manager
3	C130	Anaya	Grewal	F	07-APR-84	6789432123	anaya.grewal@gmail.com	40000	Service	30000	HR Executive
4	C103	Arun	Shabarwal	M	09-SEP-78	8989234123	arun.s@gmail.com	80000	Self-Employed	40000	Play School Owner
5	C104	Mayank	Mittal	M	20-JAN-87	8978654563	mayank.mittal@gmail.com	120000	Self-Employed	60000	Fitness Trainer
6	C105	Kiran	Jain	F	15-AUG-79	8097652345	kiran.jain@gmail.com	200000	Self-Employed	80000	Chartered Accountant
7	C106	Sapna	Ranjan	F	12-JUN-80	9997865432	sapna.ranjan@gmail.com	80000	Service	30000	HR Manager
8	C107	Geetika	Kumari	F	02-APR-89	9011234568	geetika.kumari@gmail.com	60000	Service	25000	Sr. Software Engineer
9	C108	Puneet	Sharma	M	19-DEC-70	8878654321	puneet.sharma@gmail.com	75000	Service	30000	DBA
10	C109	Pooja	Agarwal	F	05-OCT-71	7756789543	pooja.agarwal@gmail.com	100000	Service	35000	Technial Lead

```
INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C103', 'Arun', 'Shabarwal', 'M', to_date('9-Sep-78', 'DD-MON-RR'), 8989234123, 'arun.s@gmail.com', 80000, 'Self-Employed', 40000, 'Play School Owner', NULL);

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C104', 'Mayank', 'Mittal', 'M', to_date('20-Jan-87', 'DD-MON-RR'), 8978654563, 'mayank.mittal@gmail.com', 120000, 'Self-Employed', 60000, 'Fitness Trainer', NULL);

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C105', 'Kiran', 'Jain', 'F', to_date('15-Aug-79', 'DD-MON-RR'), 8097652345, 'kiran.jain@gmail.com', 200000, 'Self-Employed', 80000, 'Chartered Accountant', NULL);

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C106', 'Sapna', 'Ranjan', 'F', to_date('12-Jun-80', 'DD-MON-RR'), 9997865432, 'sapna.ranjan@gmail.com', 80000, 'Service', 30000, 'HR Manager', 'Wipro');

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C107', 'Geetika', 'Kumari', 'F', to_date('2-Apr-89', 'DD-MON-RR'), 9011234568, 'geetika.kumari@gmail.com', 60000, 'Service', 25000, 'Sr. Software Engineer', 'IBM');

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C108', 'Puneet', 'Sharma', 'M', to_date('19-Dec-70', 'DD-MON-RR'), 8878654321, 'puneet.sharma@gmail.com', 75000, 'Service', 30000, 'DBA', 'TerraData');

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C109', 'Pooja', 'Agarwal', 'F', to_date('5-Oct-71', 'DD-MON-RR'), 7756789543, 'pooja.agarwal@gmail.com', 100000, 'Service', 35000, 'Technial Lead', 'IBM');

INSERT INTO LMS_customer_kushmakar (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, DATE_OF_BIRTH, CONTACT_NUMBER, EMAIL_ADDRESS, MONTHLY_INCOME, PROFESSION, TOTAL_MONTHLY_EXPENSE, DESIGNATION, COMPANY_NAME)
VALUES ('C110', 'Sapan', 'Gupta', 'M', to_date('10-Apr-88', 'DD-MON-RR'), 7987654422, 'sapan.gupta@gmail.com', 90000, 'Self-Employed', 40000, 'Interior Designer', NULL);
```

Script Output x  
Task completed in 0.096 seconds

1 row inserted.

## 6) Populate the table with the remaining rows of sample data using the excel file.

```

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

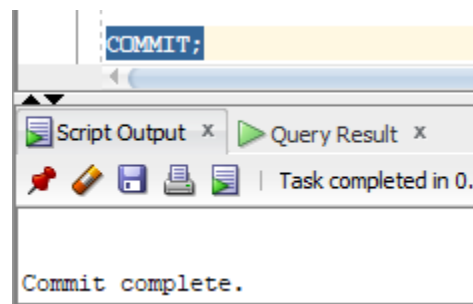
1 row inserted.

```

## 7) Confirm your additions to the table.

CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION
11 C110	Sapan	Gupta	M	10-APR-88	7987654422	sapan.gupta@gmail.com	90000	Self-Employed	40000	Interior Designer
12 C111	Abhay	Singh	M	17-MAY-82	8932457654	abhay.singh@gmail.com	45000	Self-Employed	15000	Graphic Designer
13 C112	Pulkit	Ahuja	M	11-APR-72	9911456743	pulkit.ahuja@gmail.com	60000	Self-Employed	20000	Content Writer
14 C113	Manju	Sharma	F	13-SEP-72	9999678954	manju.sharma@gmail.com	125000	Service	38000	Solution Consultant
15 C114	Snehal	Tiwari	F	26-JAN-74	8769787654	snehal.tiwari@gmail.com	100000	Service	60000	Project Manager
16 C115	Abhishek	Kumar	M	02-OCT-69	8134567890	abhishek.kumar@gmail.com	230000	Self-Employed	80000	Event Planner
17 C116	Raj	Arora	M	10-SEP-90	7895432123	raj.arora@gmail.com	65000	Service	25000	Sr. Software Engineer
18 C117	Pallavi	Joshi	F	12-JUN-89	8765908921	pallavi.joshi@gmail.com	40000	Service	30000	Software Engineer
19 C118	Surjit	Kaur	F	11-MAR-74	8967885431	surjit.kaur@gmail.com	125000	Service	45000	Solution Consultant
20 C119	Karan	Singh	M	10-MAY-73	8888675432	karan.singh@gmail.com	70000	Self-Employed	28000	Fitness Trainer
21 C120	Raman	Jaiswal	M	07-JAN-88	9780006643	raman.jaiswal@gmail.com	200000	Self-Employed	70000	Event Planner
22 C121	Atif	Rana	M	18-APR-87	9124678901	atif.rana@gmail.com	45000	Self-Employed	30000	Digital Marketing
23 C122	Deepak	Kumar	M	15-JUN-76	7089654321	deepak.kumar@gmail.com	45000	Self-Employed	20000	Digital Marketing
24 C123	Sneha	Raj	F	19-NOV-85	9801345678	sneha.raj@gmail.com	100000	Service	40000	Technical Manager
25 C124	Bhavana	Sharma	F	25-DEC-84	8674532789	bhavana.sharma@gmail.com	100000	Service	35000	Project Manager

## 8. Make the data additions permanent.



--9. In the same manner, insert the rows in the rest of the tables.

19	C118	Surjit	Kaur	F	11-MAR-74	8967885431 surjit.kaur@gmail.com	125000 Service	45000 Solution Consultant
20	C119	Karan	Singh	M	10-MAY-73	8888675432 karan.singh@gmail.com	70000 Self-Employed	28000 Fitness Trainer
21	C120	Raman	Jaiswal	M	07-JAN-88	9780006643 raman.jaiswal@gmail.com	200000 Self-Employed	70000 Event Planner
22	C121	Atif	Rana	M	18-APR-87	9124678901 atif.rana@gmail.com	45000 Self-Employed	30000 Digital Marketing
23	C122	Deepak	Kumar	M	15-JUN-76	7089654321 deepak.kumar@gmail.com	45000 Self-Employed	20000 Digital Marketing
24	C123	Sneha	Raj	F	19-NOV-85	9801345678 sneha.raj@gmail.com	100000 Service	40000 Technical Manager
25	C124	Bhavana	Sharma	F	25-DEC-84	8674532789 bhavana.sharma@gmail.com	100000 Service	35000 Project Manager
26	C125	Bharati	Raheja	F	10-DEC-69	9783452123 bharati.raheja@gmail.com	95000 Service	38000 DBA
27	C126	Mamta	Kumari	F	11-JAN-76	8567842314 mamta.kumari@gmail.com	65000 Self-Employed	40000 Freelance Developer
28	C127	Bhavay	Gupta	M	20-AUG-78	9344123456 bhavay.gupta@gmail.com	65000 Self-Employed	30000 Freelance Developer
29	C128	Dhawal	Kishore	M	14-APR-77	8653358913 dhawal.kishore@gmail.com	80000 Service	30000 Technical Lead

--10) Change the last name of the Customer 3 to 'Sharma'.

```
UPDATE LMS_customer_kushmakar SET LAST_NAME = 'Sharma' WHERE CUSTOMER_ID = 'C103';
```

Script Output x

Query Result x

Task completed in 0.029 seconds

1 row inserted.

11. Change the Profession, designation and Company Name of Customer 4 to 'Service', 'Asst Manager', 'Wipro' respectively.

```
UPDATE LMS_customer_kushmakar SET PROFESSION= 'Service', DESIGNATION= 'Asst Manager',COMPANY_NAME = 'Wipro' WHERE CUSTOMER_ID = 'C104';
```

Script Output x

Query Result x

Task completed in 0.03 seconds

1 row updated.

12) Delete the customer whose monthly income is less than 40000.

```
DELETE FROM LMS_customer_kushmakar WHERE TOTAL_MONTHLY_EXPENSE<40000;
```

Script Output x

Query Result x

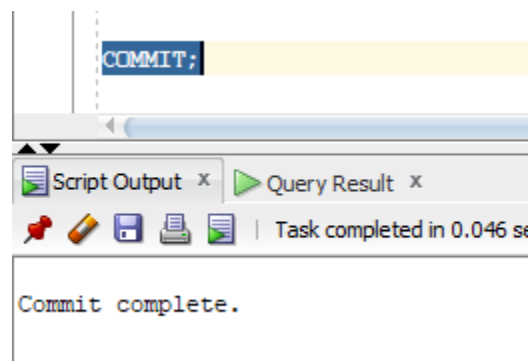
Task completed in 0.126 seconds

18 rows deleted.

13) Delete the Loans from LoanAgreement table whose disbursal date is before 2000.

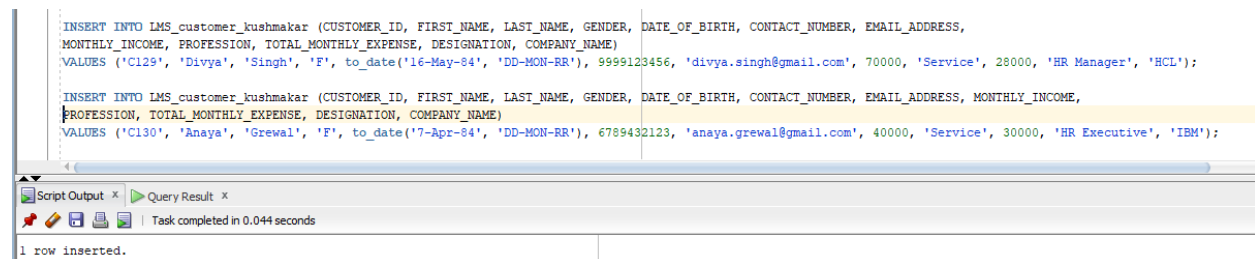
```
DELETE FROM LMS_AGREEMENT_DTL_kushmakar WHERE LOAN_DISBURAL_DATE < 01-Jan- 2000;
```

14) Commit all pending changes.

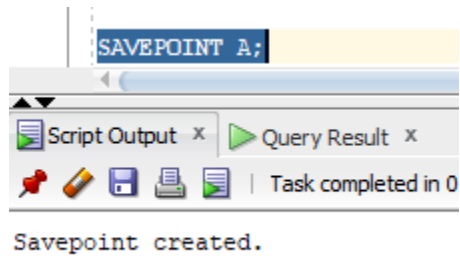


## Control Data Transactions:

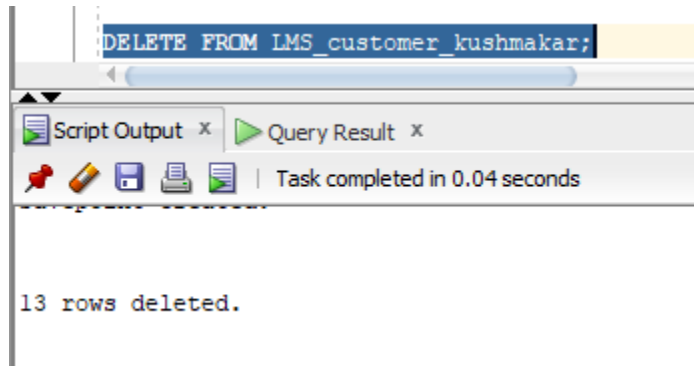
15. In the Customer table, insert two more rows from the sample data listed in Step by using the statements in the script that you created in Step. Run the statement in the script



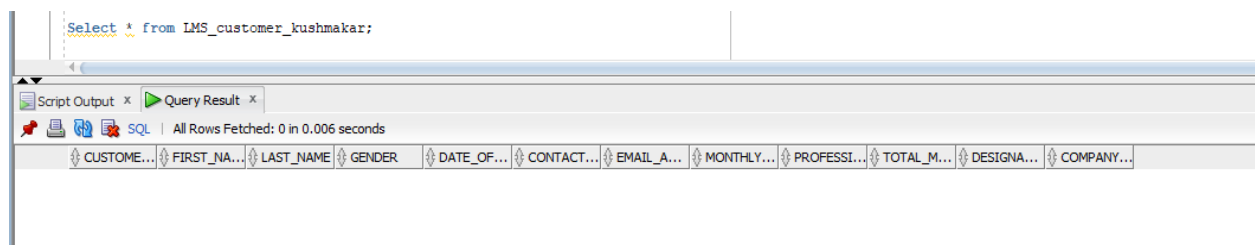
16. Mark an intermediate point in the processing of the transaction



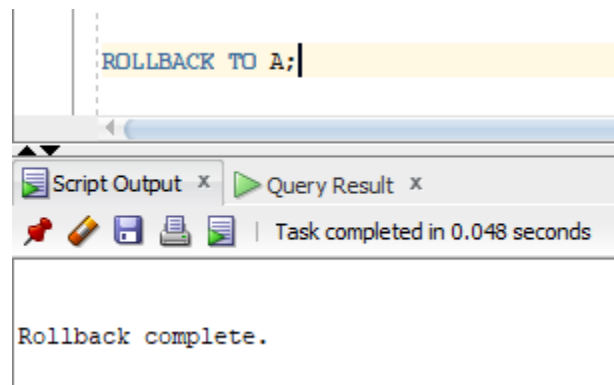
17. Empty the entire table



18. Confirm that the table is empty



19. Discard the most recent DELETE without discarding the earlier INSERT operations.



20. Confirm that the new row is still intact

The screenshot shows a SQL IDE interface with a query result table. The query is `Select * from LMS_customer_kushmakar;`. The table has 13 rows and 12 columns. The status bar indicates "All Rows Fetched: 13 in 0.006 seconds".

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	DATE_OF_BIRTH	CONTACT_NUMBER	EMAIL_ADDRESS	MONTHLY_INCOME	PROFESSION	TOTAL_MONTHLY_EXPENSE	DESIGNATION	COMPANY_NAME
1	C102	Rekha	Arora	F	08-AUG-76	9878974561	arekha@gmail.com	100000	Service	40000	Project Manager	TCS
2	C103	Arun	Sharma	M	09-SEP-78	8989234123	arun.s@gmail.com	80000	Self-Employed	40000	Play School Owner	(null)
3	C104	Mayank	Mittal	M	20-JAN-87	8978654563	mayank.mittal@gmail.com	120000	Service	60000	Asst Manager	Wipro
4	C105	Kiran	Jain	F	15-AUG-79	8097652345	kiran.jain@gmail.com	200000	Self-Employed	80000	Chartered Accountant	(null)
5	C110	Sapan	Gupta	M	10-APR-88	7987654422	sapan.gupta@gmail.com	90000	Self-Employed	40000	Interior Designer	(null)
6	C114	Snehal	Tiwari	F	26-JAN-74	8769787654	snehal.tiwari@gmail.com	100000	Service	60000	Project Manager	Wipro
7	C115	Abhishek	Kumar	M	02-OCT-69	8134567890	abhishek.kumar@gmail.com	230000	Self-Employed	80000	Event Planner	(null)
8	C118	Surjit	Kaur	F	11-MAR-74	8967885431	surjit.kaur@gmail.com	125000	Service	45000	Solution Consultant	HCL
9	C120	Raman	Jaiswal	M	07-JAN-88	9780006643	raman.jaiswal@gmail.com	200000	Self-Employed	70000	Event Planner	(null)
10	C123	Sneha	Raj	F	19-NOV-85	9801345678	sneha.raj@gmail.com	100000	Service	40000	Technical Manager	Nucleus

21. Make the data addition permanent

