Problem Statement 14 (DML USING MYSQL)
Create following tables using a given schema and insert appropriate data into the same:
Customer (CustID, Name, Cust_Address, Phone_no, Email_ID, Age)
Branch (Branch ID, Branch_Name, Address)
Account (Account_no, Branch ID, CustID, date_open, Account_type, Balance)
1. Modify the size of column "Email_Address" to 20 in Customer table.
2. Change the column "Email_Address" to Not Null in Customer table.
3. Display the total customers with the balance >50, 000 Rs.
4. Display average balance for account type="Saving Account".
5. Display the customer details that lives in Pune or name starts with 'A'.
6. Create a table Saving_Account with (Account_no, Branch ID, CustID, date_open, Balance) using
Account Table.
7. Display the customer details Age wise with balance>=20,000Rs
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CREATE DATABASE DML;

```
CREATE TABLE Customer (
    CustID INT PRIMARY KEY,
    Name VARCHAR(50),
    Cust_Address VARCHAR(100),
    Phone_no VARCHAR(15),
    Email_ID VARCHAR(50),
    Age INT
);
```

```
CREATE TABLE Branch (
    Branch_ID INT PRIMARY KEY,
    Branch_Name VARCHAR(50),
    Address VARCHAR(100)
);
```

```
CREATE TABLE Account (
    Account_no INT PRIMARY KEY,
    Branch_ID INT,
    CustID INT,
    date_open DATE,
    Account_type VARCHAR(20),
    Balance DECIMAL(15, 2),
    FOREIGN KEY (Branch_ID) REFERENCES Branch(Branch_ID),
    FOREIGN KEY (CustID) REFERENCES Customer(CustID)
);
```


Insert values


```
INSERT INTO Customer (CustID, Name, Cust_Address, Phone_no, Email_ID, Age) VALUES
(1, 'Alice', '123 Main St, Pune', '1234567890', 'alice@example.com', 30),
(2, 'Bob', '456 Park Ave, Mumbai', '0987654321', 'bob@example.com', 40),
(3, 'Catherine', '789 Sunset Blvd, Pune', '1122334455', 'cat@example.com', 25);
```

```
INSERT INTO Branch (Branch_ID, Branch_Name, Address) VALUES
(1, 'Central', '123 Main St'),
(2, 'North', '456 Park Ave');


INSERT INTO Account (Account_no, Branch_ID, CustID, date_open, Account_type,
Balance) VALUES
(101, 1, 1, '2020-01-01', 'Saving Account', 60000),
(102, 2, 2, '2021-02-15', 'Current Account', 40000),
(103, 1, 3, '2022-03-20', 'Saving Account', 70000);
```

1.   Modify the size of column "Email_Address" to 20 in Customer table.

```
ALTER TABLE Customer MODIFY Email_ID VARCHAR(20);
```

2.   Change the column "Email_Address" to Not Null in Customer table.

```
ALTER TABLE Customer MODIFY Email_ID VARCHAR(20) NOT NULL;
```

3.   Display the total customers with the balance >50, 000 Rs.

```
SELECT COUNT(*) AS Total_Customers
FROM Account
WHERE Balance > 50000;
```

4.   Display average balance for account type="Saving Account".

```
SELECT AVG(Balance) AS Average_Balance
FROM Account
WHERE Account_type = 'Saving Account';
```

5.   Display the customer details that lives in Pune or name starts with 'A'.

```
SELECT *
FROM Customer
WHERE Cust_Address LIKE '%Pune%' OR Name LIKE 'A%';
```

6.   Create a table Saving_Account with (Account_no, Branch ID, CustID, date_open,
Balance) using Account Table.

```
CREATE TABLE Saving_Account AS
SELECT Account_no, Branch_ID, CustID, date_open, Balance
FROM Account
WHERE Account_type = 'Saving Account';
```

7.   Display the customer details Age wise with balance>=20,000Rs

```
SELECT C.*

FROM Customer C
JOIN Account A ON C.CustID = A.CustID
WHERE A.Balance >= 20000
```

```
ORDER BY C.Age;
```