DAY 3

09/07/2025

GitHub

1.Add primary key constraint to customer_id in customer table.

alter table customer add constraint pk_customer_id primary key (CUSTOMER_ID);

Field	Type	Null	Key	Default	Extra
CUSTOMER_ID	varchar(20)	NO	PRI	NULL	
FIRSTNAME	varchar(30)	YES		NULL	
CUSTOMER_CITY	varchar(15)	YES		NULL	
CUSTOMER_CONTACT_NO	varchar(10)	YES		NULL	
OCCUPATION	varchar(10)	YES		NULL	
CUSTOMER_DATE_OF_BIRTH	date	YES		NULL	
LASTNAME	varchar(20)	YES		NULL	

2.Add primary key constraint to account_number in account table.

alter table account add constraint pk_account_number primary key (ACCOUNT_NUMBER);

3.Add foreign key constraint to customer_number in account table which refers customer_id of customer table.

alter table account add constraint fk_customer_number foreign key (CUSTOMER_NUMBER) references customer(CUSTOMER_ID);

Field	Type	Null	Key	Default	Extra
ACCOUNT_NUMBER	varchar(20)	NO	PRI	NULL	
CUSTOMER_NUMBER	varchar(20)	YES	MUL	NULL	
BRANCH_ID	varchar(10)	YES		NULL	
OPENING_BALANCE	double	YES		NULL	
ACCOUNT_OPENING_DATE	date	YES		NULL	
ACCOUNT_TYPE	varchar(10)	YES		NULL	
ACCOUNT_STATUS	varchar(10)	YES		NULL	

4.Write a query to display the number of customer's from Chennai. Give the count an alias name of Cust_Count.

select count(*) Cust_Count from customer where CUSTOMER_CITY = 'Chennai';

Cust_Count
2

5.Write a query to display the customer number, customer firstname,account number for the customer's whose accounts were created after 15th of any month.

```
select
   acc.CUSTOMER_NUMBER,
   cus.FIRSTNAME,
   acc.ACCOUNT_NUMBER
from account acc
join customer cus on acc.CUSTOMER_NUMBER = cus.CUSTOMER_ID
where day(acc.ACCOUNT_OPENING_DATE) > 15;
```

CUSTOMER_NUMBER	FIRSTNAME	ACCOUNT_NUMBER
C004	Priya	A1004

6.Write a query to display the number of customers who have registration but no account in the bank. Give the alias name as Count_Customer for number of customers.

```
select count(*) Count_Customer
from customer
where CUSTOMER_ID not in (select CUSTOMER_NUMBER from account);
```

Count_Customer
0

7.Create table transaction_details with columns transaction_number VARCHAR(6), account_number VARCHAR(6), date_of_transaction DATE, medium_of_transaction VARCHAR(20), transaction_type VARCHAR(20), transaction_amount double

```
create table transaction_details (
   TRANSACTION_NUMBER VARCHAR(6),
   ACCOUNT_NUMBER VARCHAR(6),
   DATE_OF_TRANSACTION DATE,
   MEDIUM_OF_TRANSACTION VARCHAR(20),
   TRANSACTION_TYPE VARCHAR(20),
   TRANSACTION_AMOUNT DOUBLE
);
```

8. Add foreign key constraint to account_number in transaction table which refers account_number of account table.

```
alter table transaction_details
add constraint fk_account_number foreign key (ACCOUNT_NUMBER)
references account(ACCOUNT_NUMBER);
```

9.Insert rows in transaction table

```
insert into transaction_details (TRANSACTION_NUMBER, ACCOUNT_NUMBER,
DATE_OF_TRANSACTION, MEDIUM_OF_TRANSACTION, TRANSACTION_TYPE,
TRANSACTION_AMOUNT) values
('T001', 'A1001', '2023-01-10', 'Online', 'Deposit', 5000.00),
('T002', 'A1001', '2023-02-12', 'ATM', 'Withdrawal', 2000.00),
('T003', 'A1002', '2023-03-15', 'Branch', 'Deposit', 4000.00),
('T004', 'A1003', '2023-04-20', 'Online', 'Withdrawal', 1000.00),
('T005', 'A1004', '2023-05-25', 'Branch', 'Deposit', 2500.00),
('T006', 'A1001', '2023-06-30', 'ATM', 'Deposit', 1500.00);
```

TRANSACTION_NUMBER	ACCOUNT_NUMBER	DATE_OF_TRANSACTION	MEDIUM_OF_TRANSACTION	TRANSACTION_TYPE	TRANSACTION_AMOUNT
T001	A1001	2023-01-10	Online	Deposit	5000
T002	A1001	2023-02-12	ATM	Withdrawal	2000
T003	A1002	2023-03-15	Branch	Deposit	4000
T004	A1003	2023-04-20	Online	Withdrawal	1000
T005	A1004	2023-05-25	Branch	Deposit	2500
T006	A1001	2023-06-30	ATM	Deposit	1500

10.Write a query to display the total number of withdrawals and total number of deposits being done by customer whose customer number ends with 001. The query should display transaction type and the number of transactions. Give an alias name as Trans_Count for number of transactions. Display the records sorted in ascending order based on transaction type.

```
select tra.TRANSACTION_TYPE, count(*) Trans_Count
from transaction_details tra
join account acc on tra.ACCOUNT_NUMBER = acc.ACCOUNT_NUMBER
where acc.CUSTOMER_NUMBER like '%001'
group by tra.TRANSACTION_TYPE
order by tra.TRANSACTION_TYPE asc;
```

TRANSACTION_TYPE	Trans_Count
Deposit	2
Withdrawal	1