TASK - 3

NAME : SANJEEV N
DATE : 09/07/2025

1. **ADD PRIMARY KEY CONSTRAINT TO** CUSTOMER_ID **IN CUSTOMER TABLE**

   ALTER TABLE Customer
   ADD CONSTRAINT PK_Customer PRIMARY KEY (CUSTOMER_ID);

	Field	Type	Null	Key	Default	Extra
▶	CUSTOMER_ID	int	NO	PRI	NULL	
	FIRSTNAME	varchar(30)	YES		NULL	
	CUSTOMER_CITY	varchar(15)	YES		NULL	
	CUSTOMER_CONTACT_NO	varchar(10)	YES		NULL	
	OCCUPATION	varchar(20)	YES		NULL	
	CUSTOMER_DOB	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 PRIMARY KEY (ACCOUNT_NUMBER);

	Field	Type	Null	Key	Default	Extra
▶	account_number	int	NO	PRI	NULL	
	CUSTOMER_NUMBER	varchar(20)	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	

3. **ADD FOREIGN KEY CONSTRAINT TO CUSTOMER_NUMBER IN ACCOUNT TABLE REFERENCING CUSTOMER(CUSTOMER_ID)**

ALTER TABLE Account
ADD CONSTRAINT FK_Account_Customer FOREIGN KEY (CUSTOMER_NUMBER)
REFERENCES Customer(CUSTOMER_ID);

Field	Type	Null	Key	Default	Extra
account_number	int	NO	PRI	NULL	
customer_number	int	NO	MUL	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. **QUERY TO COUNT NUMBER OF CUSTOMERS FROM CHENNAI WITH ALIAS CUSTOMER_COUNT**

SELECT COUNT(*) AS CUSTOMER_COUNT
FROM Customer
WHERE CUSTOMER_CITY = 'Chennai';

Customer_count
2

5. **QUERY TO DISPLAY CUSTOMER NUMBER, FIRST NAME, AND ACCOUNT NUMBER FOR ACCOUNTS CREATED AFTER 15TH OF ANY MONTH**

SELECT a.CUSTOMER_NUMBER, c.FIRSTNAME, a.ACCOUNT_NUMBER
FROM Account a
JOIN Customer c ON a.CUSTOMER_NUMBER = c.CUSTOMER_ID
WHERE DAY(a.ACCOUNT_OPENING_DATE) > 15;

	customer_number	Firstname	account_number
▶	4	Surya	4

6. QUERY TO COUNT CUSTOMERS WHO ARE REGISTERED BUT HAVE NO ACCOUNT, ALIAS AS COUNT_CUSTOMER

SELECT COUNT(*) AS Count_Customer FROM Customer c WHERE NOT EXISTS
(SELECT 1 FROM Account a WHERE a.CUSTOMER_NUMBER = c.CUSTOMER_ID);

	Count_Customer
▶	0

0

7. CREATE TRANSACTION_DETAILS TABLE

CREATE TABLE transaction_details (
TRANSACTION_NUMBER INT,
ACCOUNT_NUMBER INT,
DATE_OF_TRANSACTION DATE,
MEDIUM_OF_TRANSACTION VARCHAR(20),
TRANSACTION_TYPE VARCHAR(20),
TRANSACTION_AMOUNT DOUBLE);

TRANSACTION_NUMBER	ACCOUNT_NUMBER	DATE_OF_TRANSACTION	MEDIUM_OF_TRANSACTION	TRANSACTION_TYPE	TRANSACTION_AMOUNT

8. **ADD FOREIGN KEY CONSTRAINT ON ACCOUNT_NUMBER REFERENCING ACCOUNT(ACCOUNT_NUMBER)**

ALTER TABLE transaction_details
ADD CONSTRAINT FK_Transaction_Account FOREIGN KEY (ACCOUNT_NUMBER)
REFERENCES Account(ACCOUNT_NUMBER);

	Field	Type	Null	Key	Default	Extra
▶	TRANSACTION_NUMBER	int	YES		NULL	
	ACCOUNT_NUMBER	int	YES	MUL	NULL	
	DATE_OF_TRANSACTION	date	YES		NULL	
	MEDIUM_OF_TRANSACTION	varchar(20)	YES		NULL	
	TRANSACTION_TYPE	varchar(20)	YES		NULL	
	TRANSACTION_AMOUNT	double	YES		NULL	

9. **INSERT SAMPLE ROWS INTO TRANSACTION_DETAILS**

INSERT INTO transaction_details (TRANSACTION_NUMBER, ACCOUNT_NUMBER, DATE_OF_TRANSACTION, MEDIUM_OF_TRANSACTION, TRANSACTION_TYPE, TRANSACTION_AMOUNT) VALUES
(11, 1, '2025-07-01', 'Online', 'Withdrawal', 3000.00),
(12, 2, '2025-07-02', 'ATM', 'Deposit', 5000.00),
(13, 3, '2025-07-03', 'Online', 'Withdrawal', 1500.00),
(14, 4, '2025-07-04', 'Branch', 'Deposit', 2000.00);

	TRANSACTION_NUMBER	ACCOUNT_NUMBER	DATE_OF_TRANSACTION	MEDIUM_OF_TRANSACTION	TRANSACTION_TYPE	TRANSACTION_AMOUNT
▶	11	1	2025-07-01	Online	Withdrawal	3000
	12	2	2025-07-02	ATM	Deposit	5000
	13	3	2025-07-03	Online	Withdrawal	1500
	14	4	2025-07-04	Branch	Deposit	2000

10. QUERY TO DISPLAY TOTAL NUMBER OF WITHDRAWALS AND DEPOSITS BY CUSTOMER NUMBER ENDING WITH '%1'

SELECT td.TRANSACTION_TYPE, COUNT(*) AS Trans_Count
FROM transaction_details td
JOIN Account a ON td.ACCOUNT_NUMBER = a.ACCOUNT_NUMBER
WHERE a.CUSTOMER_NUMBER LIKE '%1'
GROUP BY td.TRANSACTION_TYPE
ORDER BY td.TRANSACTION_TYPE ASC;

	TRANSACTION_TYPE	Trans_Count
▶	Deposit	1