NAME: NANCY M
DATE : 09-07-2025

Ques 1:

Add primary key constraint to customer_id in customer table.

Ans 1:

alter table customer add constraint 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	

Ques 2:

Add primary key constraint to account_number in account table.

Ans 2:

Field	Type	Null	Key	Default	Extra
account_number	varchar(20)	NO	PRI	NULL	
customer_number	varchar(20)	YES		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	

Ques 3

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

Ans 3:

alter table account add constraint foreign key (customer_number) references customer(CUSTOMER_ID);
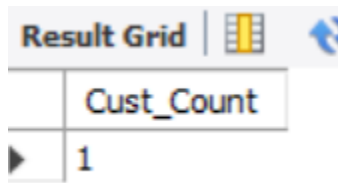
Field	Type	Null	Key	Default	Extra
account_number	varchar(20)	NO	PRI	NULL	
customer_number	varchar(20)	YES	MUL	NULL	
branch_id	varchar(10)	YES		NULL	
opening_balance	double	YES		NULL	
account_opening_date	date	YES		NULL	
account_type	varchar(10)	YES		NULL	
account_status	varchar(10)	YES		NULL	

Ques 4:

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

Ans 4:

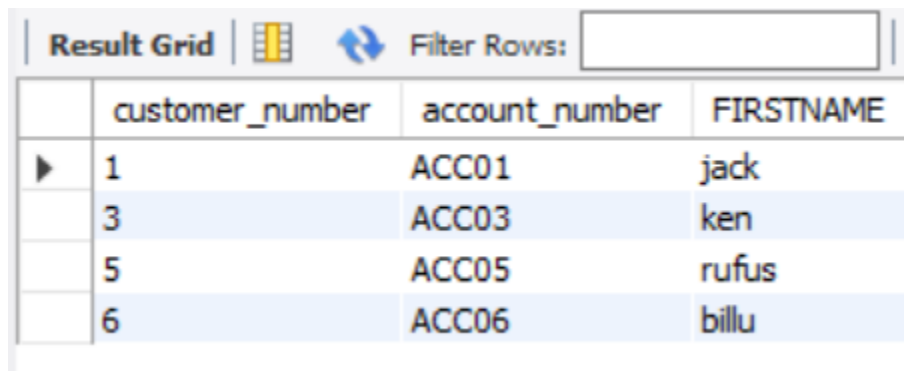select count(*) as   Cust_Count from customer where customer_city='chennai';

Cust_Count
1

Ques 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.

Ans 5:

select account.customer_number,account.account_number,customer.FIRSTNAME from customer inner join account on customer.CUSTOMER_ID=account.customer_number where day(account.account_opening_date)>=15;

customer_number	account_number	FIRSTNAME
1	ACC01	jack
3	ACC03	ken
5	ACC05	rufus
6	ACC06	billu

Ques 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.

Ans 6:

select count(*) as Count_Customer from customer left join account on customer.CUSTOMER_ID = account.customer_number where account.customer_number is null;

Result Grid	Filt
Count_Customer	
▶	1

Ques 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

Ans 7:

```
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);
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ‡A

transaction_number	account_number	date_of_transaction	medium_of_transaction	transaction_type	transaction_amount

Ques 8:

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

Ans 8:

alter table transaction_details add constraint acc_num_trans foreign key (account_number) references account(account_number);

Field	Type	Null	Key	Default	Extra
transaction_number	varchar(6)	YES		NULL	
account_number	varchar(6)	YES	MUL	NULL	
date_of_transaction	date	YES		NULL	
medium_of_transaction	varchar(20)	YES		NULL	
transaction_type	varchar(20)	YES		NULL	

Result 68 ⌄

Ques 9:

Insert rows in transaction table

Ans 9:

insert into transaction_details values('T001', 'ACC001', '2024-07-01', 'Online',   'Deposit', 5000.00),
('T002', 'ACC002', '2024-07-03', 'ATM',   'Withdrawal', 2000.00),
('T003', 'ACC001', '2024-07-05', 'Branch',   'Deposit',   10000.00),
('T004', 'ACC003', '2024-07-06', 'UPI',   'Withdrawal', 1500.00),
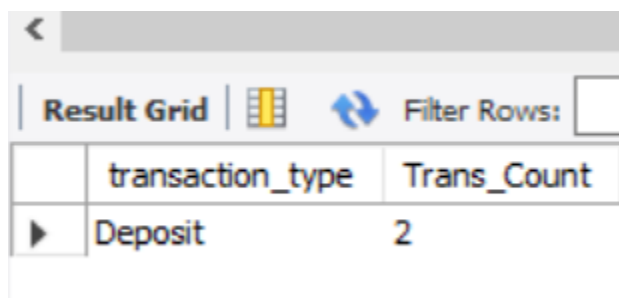('T005', 'ACC004', '2024-07-07', 'NetBanking','Deposit',   8000.00);

transaction_number	account_number	date_of_transaction	medium_of_transaction	transaction_type	transaction_amount
T001	ACC001	2024-07-01	Online	Deposit	5000
T002	ACC002	2024-07-03	ATM	Withdrawal	2000
T003	ACC001	2024-07-05	Branch	Deposit	10000
T004	ACC003	2024-07-06	UPI	Withdrawal	1500
T005	ACC004	2024-07-07	NetBanking	Deposit	8000

Ques 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.

Ans 10:

select t.transaction_type,count(t.account_number) as Trans_Count from transaction_details t
inner join account a on t.account_number=a.account_number
WHERE a.customer_number like "%1"
group by t.transaction_type
order by t.transaction_type ASC;

	transaction_type	Trans_Count
▶	Deposit	2

Result Grid Filter Rows: