

Day 3

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Questions

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

create table Customers(customer_id varchar(20) primary key ,firstname varchar(30),lastname varchar(20),customer_city varchar(15),Customer_contact_no varchar(10),occupation varchar(10),customer_date_of_birth date);

	Field	Type	Null	Key	Default	Extra
▶	customer_id	varchar(20)	NO	PRI	NULL	
	firstname	varchar(30)	YES		NULL	
	lastname	varchar(20)	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	

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

create table account(account_number varchar(20) primary key,customer_number varchar(20),branch_id varchar(10),opening_balance double ,account_opening_date date,account_type varchar(10),account_status varchar(10));

	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	

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

alter table account add constraint fk_customernumber foreign key (customer_number) references Customers(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(customer_id) as Cust_Count from customers where customer_city="chennai";
```

	Cust_Count
▶	1

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 c.customer_id ,c.firstname,a.account_number from customers c join account a  
on c.customer_id = a.customer_number where day(a.account_opening_date) > 15;
```

	customer_number	customer_firstname	account_number
▶	C04	kavi	A04

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(customer_number) as Count_Customer from customers c  
left join account a on c.customer_id = a.customer_number where a.customer_number is Null;
```

	Count_Customer
▶	1

**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) primary key,
 account_number VARCHAR(6),
 date_of_transaction DATE,
 medium_of_transaction VARCHAR(20),
 transaction_type VARCHAR(20),
 transaction_amount double);

	Field	Type	Null	Key	Default	Extra
►	transaction_number	varchar(6)	NO	PRI	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	
	transaction_amount	double	YES		NULL	

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);

	Field	Type	Null	Key	Default	Extra
►	transaction_number	varchar(6)	NO	PRI	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	
	transaction_amount	double	YES		NULL	

9. Insert rows in transaction table

insert into transaction_details values

('T01', 'A01', '2025-06-15', 'online', 'withdrawal', 2000.00),
 ('T02', 'A02', '2025-06-20', 'ATM', 'deposit', 5000.00),
 ('T03', 'A03', '2025-07-01', 'online', 'deposit', 1500.00),
 ('T04', 'A04', '2025-07-05', 'ATM', 'withdrawal', 1000.00),
 ('T05', 'A05', '2025-07-08', 'online', 'deposit', 3000.00);

	transaction_number	account_number	date_of_transaction	medium_of_transaction	transaction_type	transaction_amount
▶	T01	A01	2025-06-15	online	withdrawal	2000
	T02	A02	2025-06-20	ATM	deposit	5000
	T03	A03	2025-07-01	online	deposit	1500
	T04	A04	2025-07-05	ATM	withdrawal	1000
	T05	A05	2025-07-08	online	deposit	3000
*	NULL	NULL	NULL	NULL	NULL	NULL

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 t.transaction_type, COUNT(t.account_number) AS Trans_Count
from transaction_details t
join account a on t.account_number = a.account_number
where a.customer_number like '%01'
group by t.transaction_type
order by t.transaction_type asc;
  
```

	transaction_type	Trans_Count
▶	withdrawal	1