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Task:

1.Add primary key constraint to customer_id in customer table

Solution:

```
alter table customer add primary key(customer_id);
```

2.Add primary key constraint to account_number in account table

Solution:

```
alter table account add primary key(account_number);
```

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

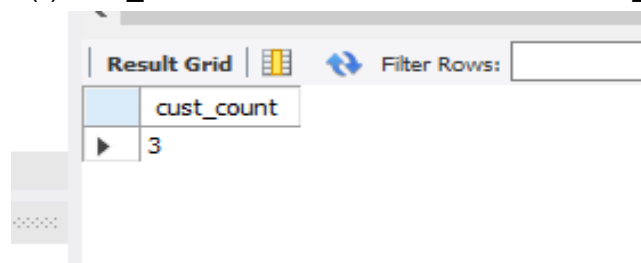
Solution:

```
alter table account add constraint foreign key (customer_number) references customer(customer_id);
```

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

Solution:

```
select count(*) 'cust_count' from customer where customer_city = 'chennai'
```



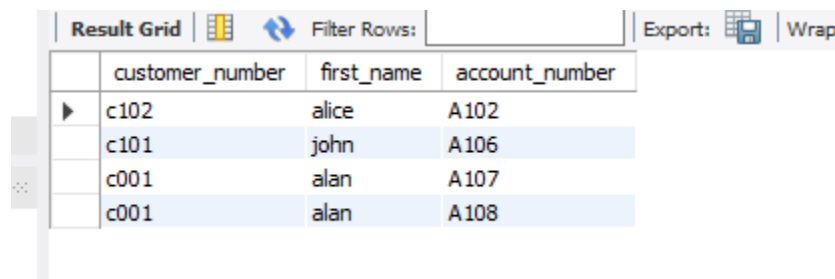
The screenshot shows a 'Result Grid' window with a 'Filter Rows' field. The grid contains one column labeled 'cust_count' and one row with the value '3'.

cust_count
3

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

Solution:

```
select customer_number,first_name,account_number from account acc join customer cus on acc.customer_number=cus.customer_id where day(account_opening_date)>15;
```



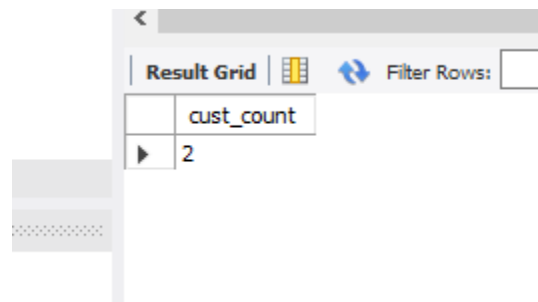
The screenshot shows a 'Result Grid' window with 'Export' and 'Wrap' buttons. The grid has four columns: 'customer_number', 'first_name', and 'account_number'. It contains four rows of data.

customer_number	first_name	account_number
c102	alice	A102
c101	john	A106
c001	alan	A107
c001	alan	A108

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

Solution:

```
select count(*) as cust_count from account acc left join customer cus on  
acc.customer_number=cus.customer_id where acc.customer_number is null;
```



	cust_count
▶	2

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
```

Solution:

```
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

Solution:

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

9. Insert rows in transaction table

Solution:

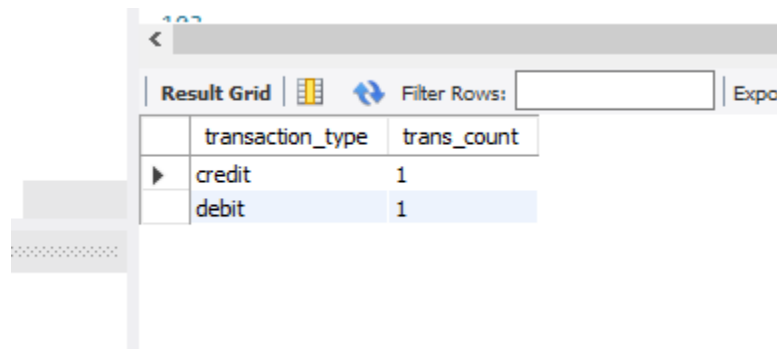
```
insert into transaction_details values('t001','A101','2025-07-07','online','credit',45000.00),  
('t002','A102','2025-07-08','atm','debit',5000.00),  
('t003','A103','2025-07-09','branch','credit',12000.00),  
('t004','A104','2025-07-10','mobile','debit',2500.00),  
('t005','A105','2025-07-11','online','credit',30000.00),
```

('t006','A107','2025-07-07','online','debit',45000.00);

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

Solution:

```
select distinct td.transaction_type, COUNT(*) trans_count
from transaction_details td
join account acc on td.account_number = acc.account_number
join customer cus on acc.customer_number = cus.customer_id
where cus.customer_id like '%001'
group by td.transaction_type
order by td.transaction_type asc;
```



The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query, showing two columns: 'transaction_type' and 'trans_count'. There are two rows: 'credit' with a count of 1, and 'debit' with a count of 1. The 'debit' row is highlighted in blue. Above the grid, there is a 'Filter Rows' input field and an 'Expo' button. The interface also includes a back arrow, a search bar, and a refresh icon.

transaction_type	trans_count
credit	1
debit	1