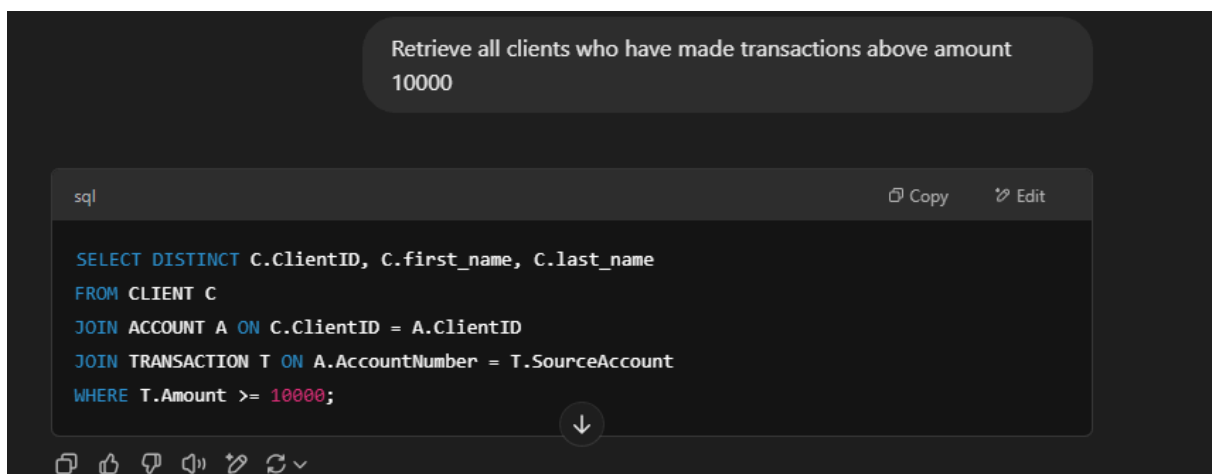


# Wrong Queries by ChatGPT

We provided ChatGPT with our relational schema and then asked some questions. It could give the correct answers for many problems, but a few had a subtle error, which we tried to fix ourselves and then used in our submission (you may check in another PDF). We are attaching screenshots of the two wrong answers.

1. I asked ChatGPT to give an SQL query to retrieve the clients who have made transactions above 10k.



The screenshot shows a ChatGPT interface with a dark theme. At the top, a user prompt in a rounded rectangle says: "Retrieve all clients who have made transactions above amount 10000". Below this, a code editor window is open, displaying a SQL query. The query is as follows:

```
sql                                                                    Copy Edit
SELECT DISTINCT C.ClientID, C.first_name, C.last_name
FROM CLIENT C
JOIN ACCOUNT A ON C.ClientID = A.ClientID
JOIN TRANSACTION T ON A.AccountNumber = T.SourceAccount
WHERE T.Amount >= 10000;
```

At the bottom of the code editor, there is a downward arrow button and a row of small icons for copy, like, dislike, voice, and other actions.



**Mistake Identification** - The query generated only checks the SourceAccount in the Transaction table, meaning it considers transactions where the client has sent money. It ignores the transactions where the client has received money, i.e., transactions where their account is the Destination Account.

2. I asked ChatGPT to give an SQL query to retrieve the clients' savings accounts and loans.

Retrieve clients who have both a savings account and a loan

sql Copy Edit

```
SELECT DISTINCT C.ClientID, C.first_name, C.last_name
FROM CLIENT C
JOIN ACCOUNT A ON C.ClientID = A.ClientID
JOIN LOAN_HOLDER LH ON C.ClientID = LH.ClientID
WHERE A.AccountType = 'Savings' OR LH.LoanNumber IS NOT NULL;
```

**Mistake Identification** - The WHERE condition here uses OR instead of AND, which means it retrieves clients who either have a savings account or a loan, rather than ensuring they have both. This will include the clients who only have a loan but no savings account.