Faculty of Technology and Engineering

Chandubhai S. Patel Institute of Technology (CSPIT)

Department of Computer Science & Engineering

Date: / /

Laboratory Manual

Academic Year	:	2024-25	Semester	:	4
Course code	:	CSE206	Course name	:	DATABASE MANAGEMENT SYSTEM

Practical - 6

AIM: You are a database administrator for a manufacturing and consulting company. The company maintains two primary tables: Product and Employee Company (emp_company). You are tasked with solving business queries related to order quantities, employee salaries, and company analysis using SQL grouping and aggregate functions. To manipulate and retrieve meaningful insights using grouping and aggregate functions in SQL while adhering to database constraints and integrity rules.

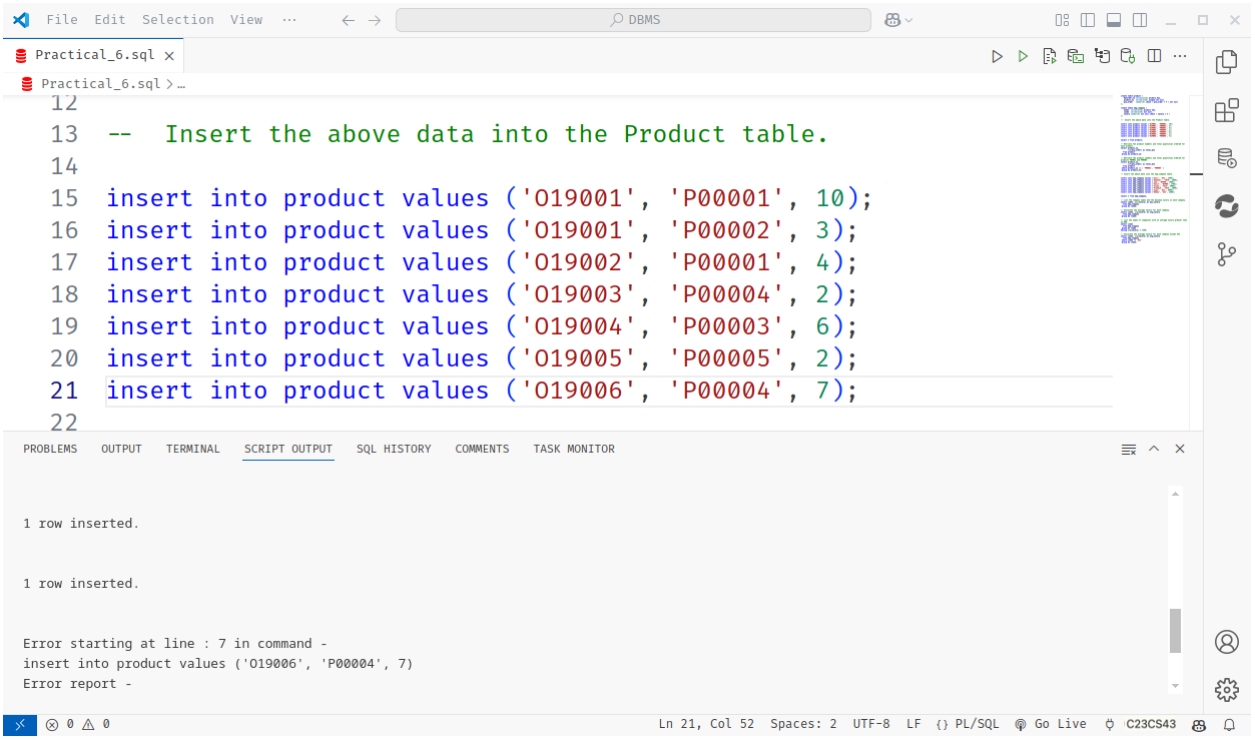
- Not Null Constraints: Critical fields such as product numbers, employee names, and salaries must not contain null values.
- Unique Constraints: Ensure the integrity of unique fields like Product_no and ENAME.
- Check Constraints: Validate that quantities and salaries have valid positive values

1. **Product Table: Tracks order details for various products.**
   - Detorder_no (Primary Key)
   - Product_no (Not Null, Unique)
   - Qty_order (Not Null, Check: Greater than zero)

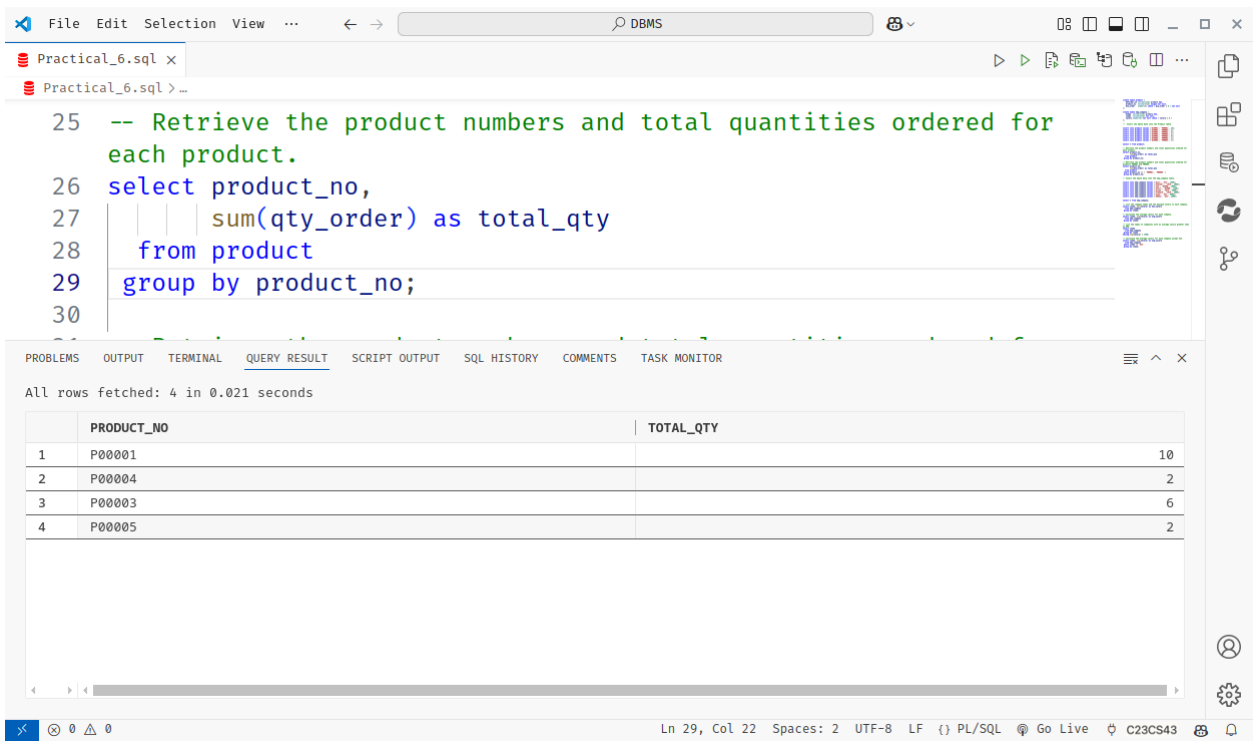
1. **emp_company Table: Tracks employees, their companies, and salaries.**

- ENAME (Not Null, Unique)
- CNAME (Not Null)
- SALARY (Not Null, Check: Greater than zero)

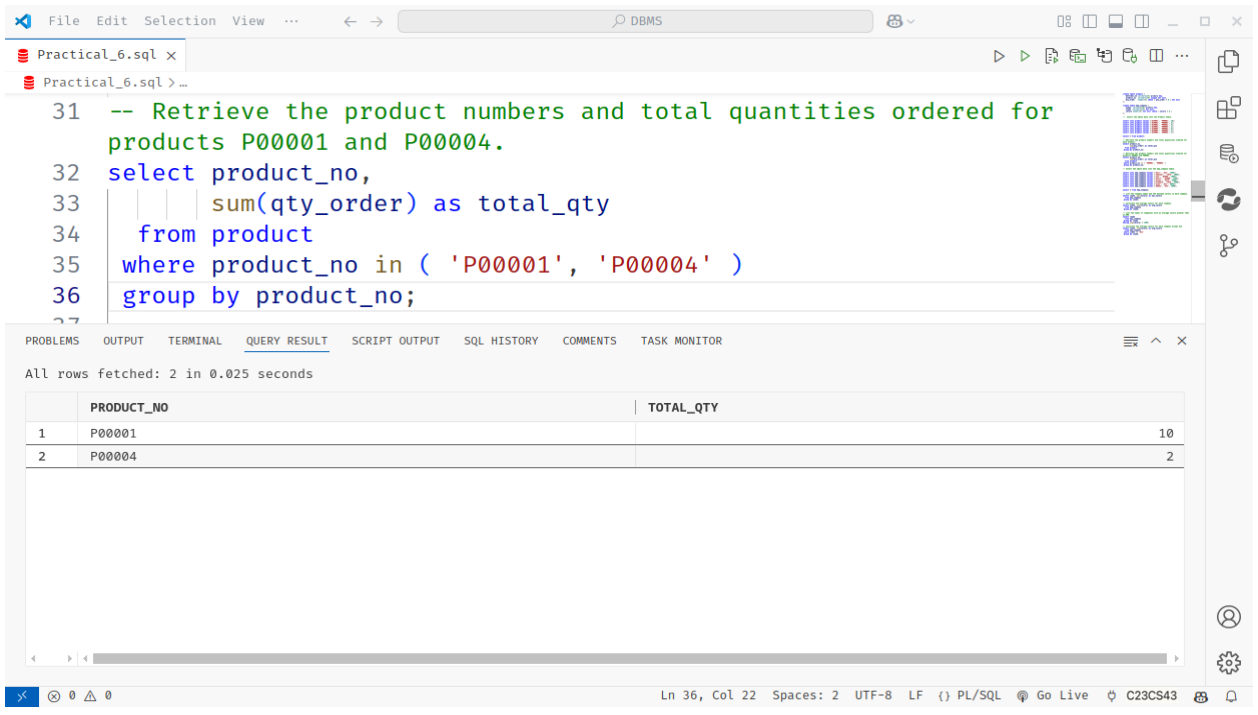
1. Insert the above data into the Product table.



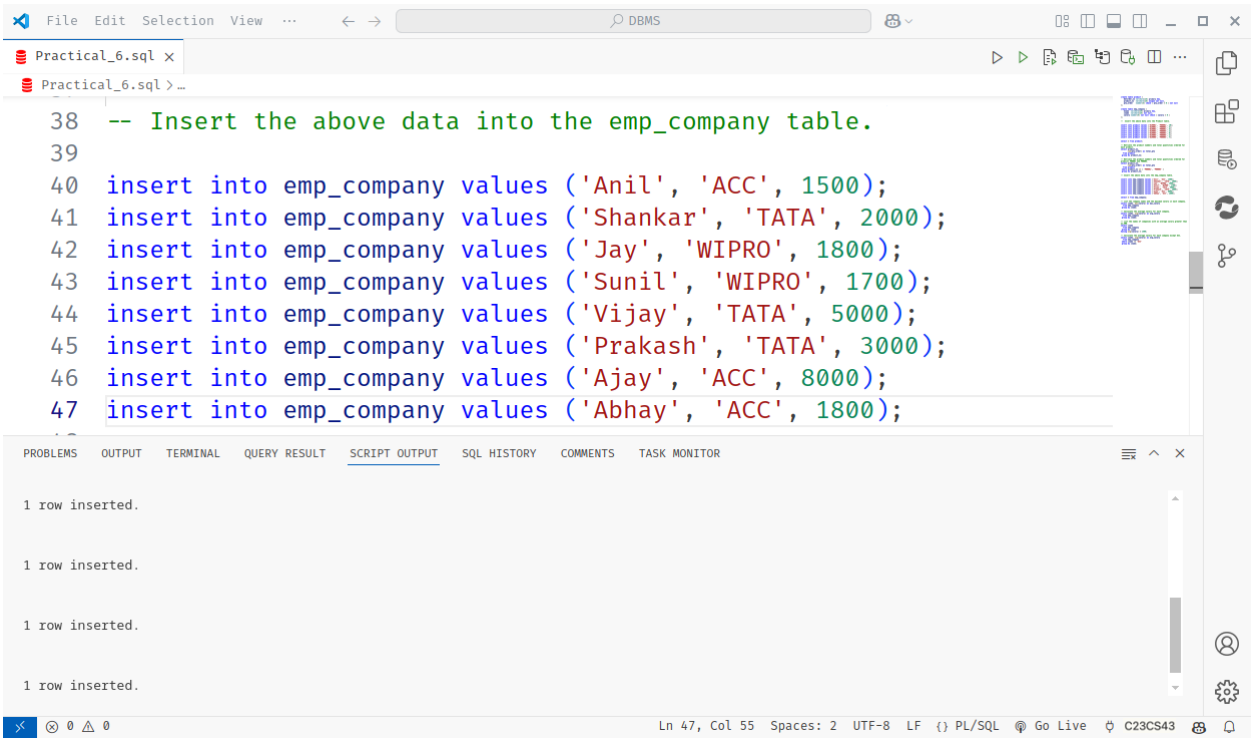
2. Retrieve the product numbers and total quantities ordered for each product.



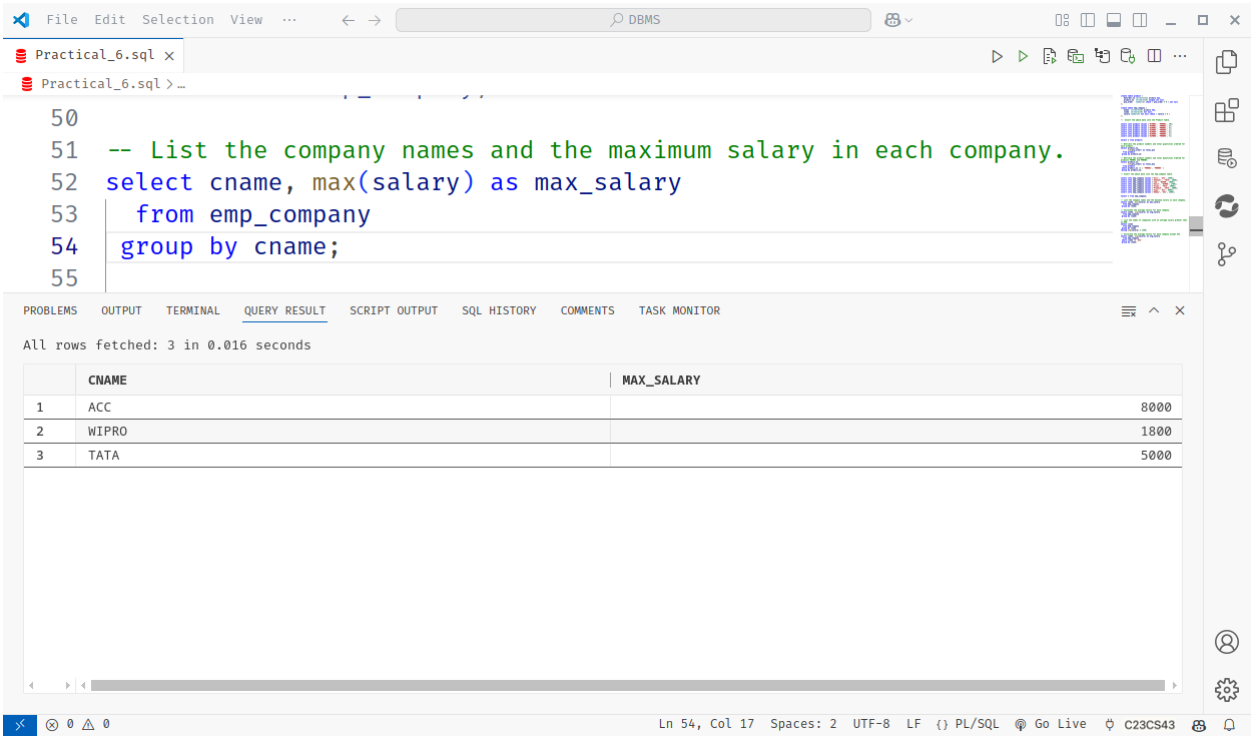
3. Retrieve the product numbers and total quantities ordered for products P00001 and P00004.



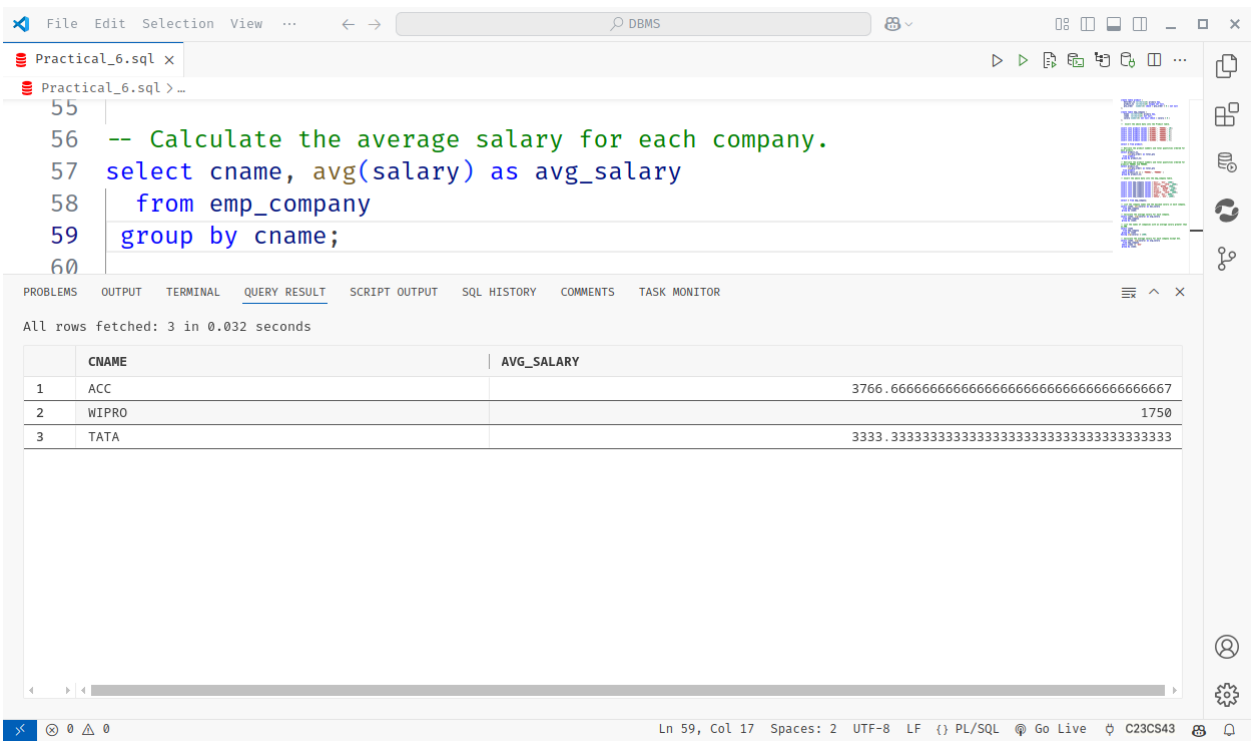
4. Insert the above data into the emp_company table.



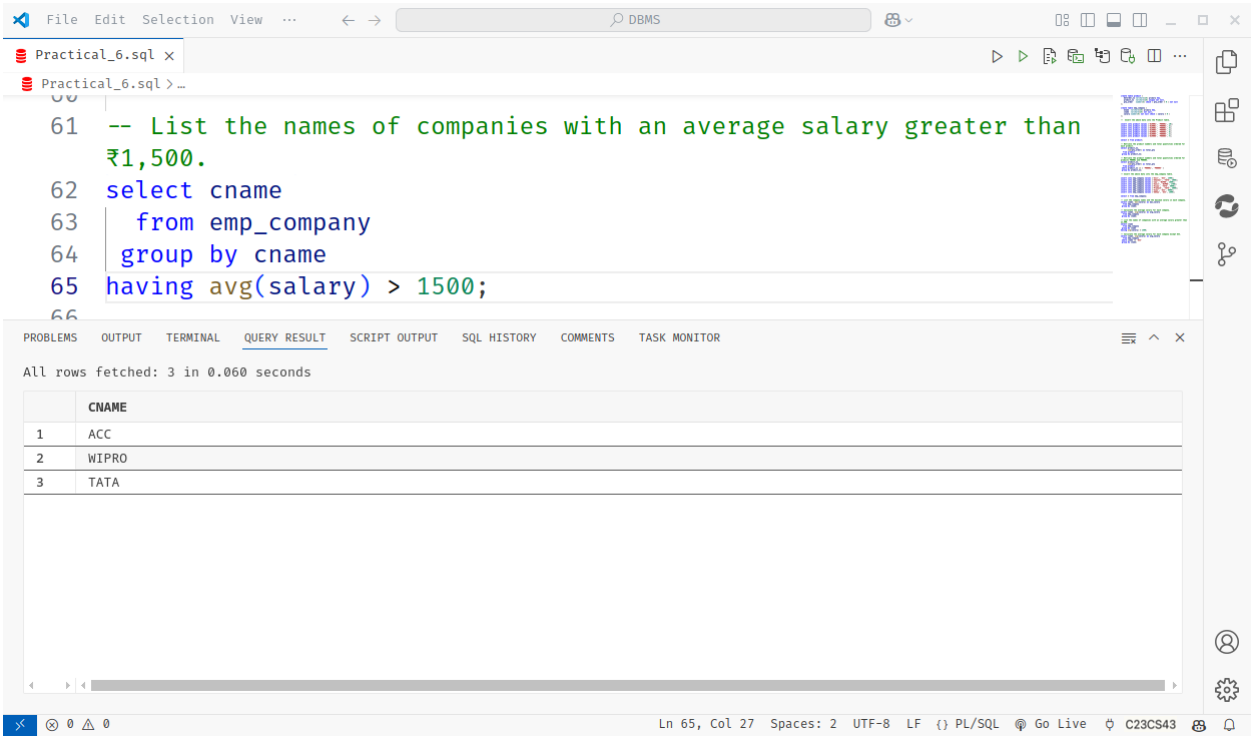
5. List the company names and the maximum salary in each company.



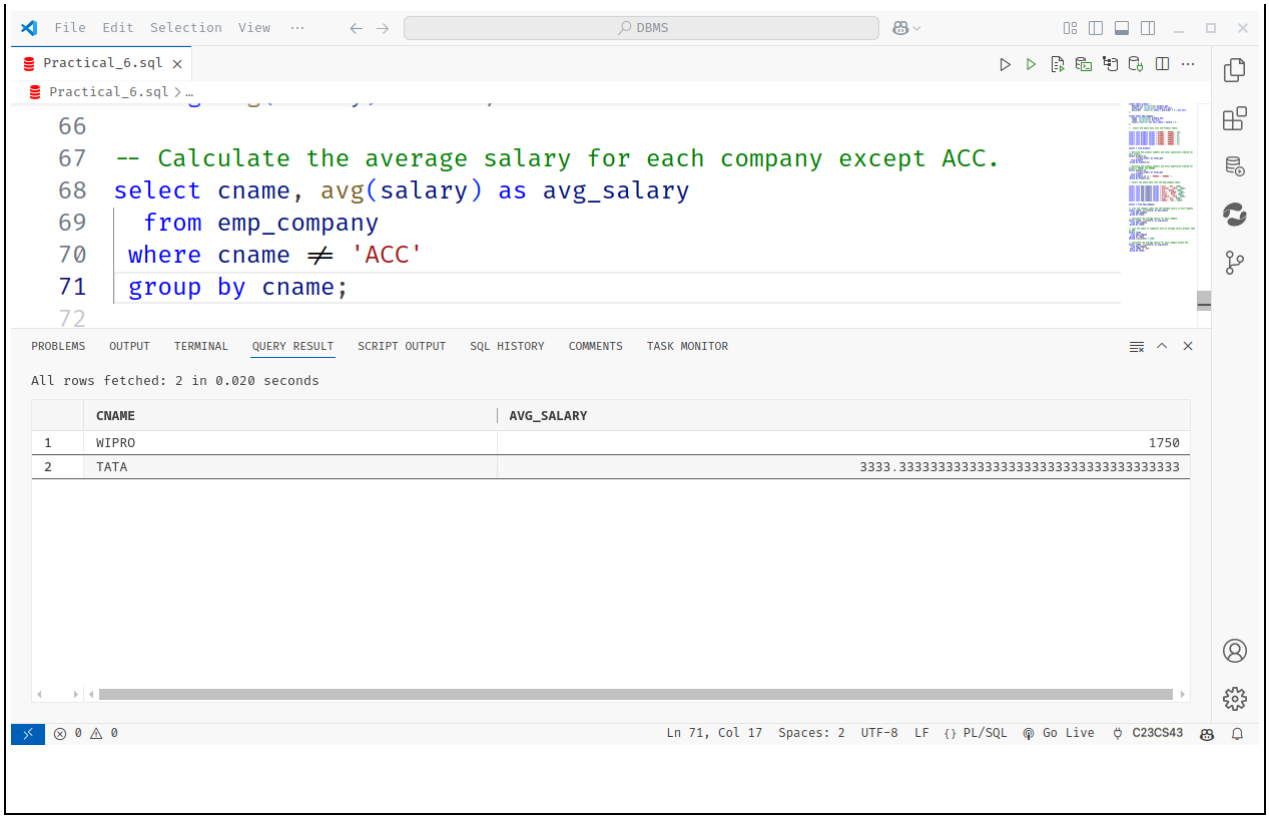
6. Calculate the average salary for each company.



7. List the names of companies with an average salary greater than ₹1,500.



8. Calculate the average salary for each company except ACC.


File Edit Selection View
DBMS
Practical_6.sql
Practical_6.sql > ...
66
67 -- Calculate the average salary for each company except ACC.
68 select cname, avg(salary) as avg_salary
69 from emp_company
70 where cname ≠ 'ACC'
71 group by cname;
72
PROBLEMS OUTPUT TERMINAL QUERY RESULT SCRIPT OUTPUT SQL HISTORY COMMENTS TASK MONITOR
All rows fetched: 2 in 0.020 seconds
CNAME AVG_SALARY
1 WIPRO 1750
2 TATA 3333.33333333333333333333333333333333
Ln 71, Col 17 Spaces: 2 UTF-8 LF {} PL/SQL Go Live C23CS43