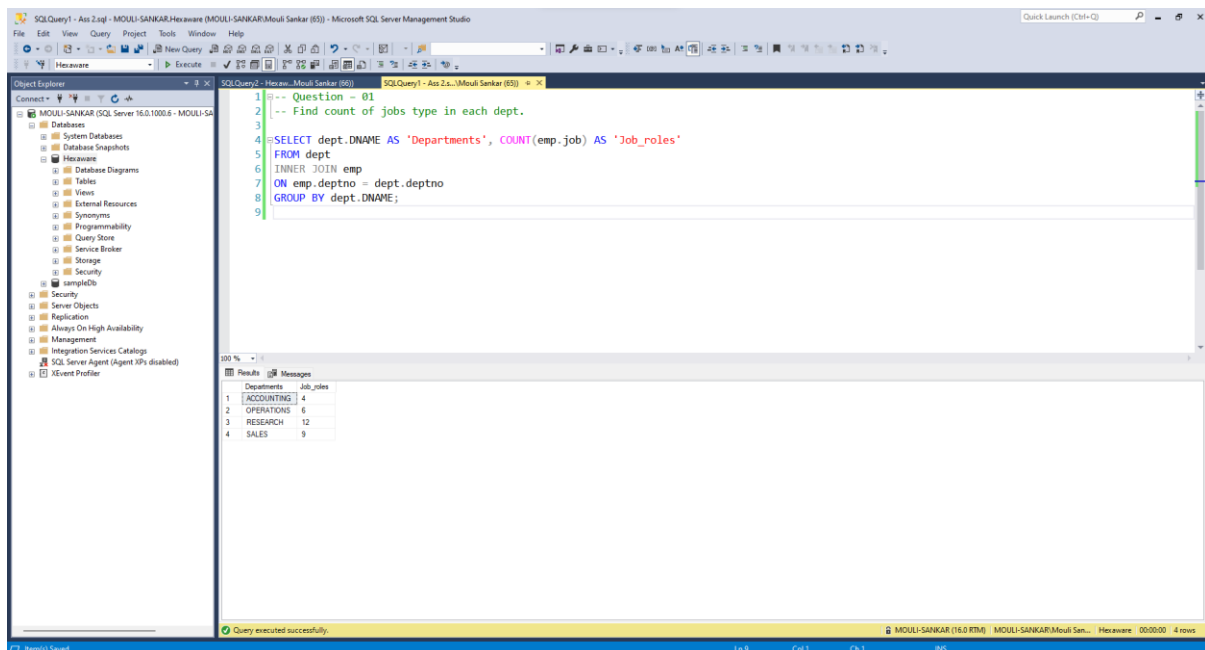


Question – 01

Find count of jobs type in each dept.

Query:

```
SELECT dept.DNAME AS 'Departments', COUNT(emp.job) AS  
'Job_roles'  
FROM dept  
INNER JOIN emp  
ON emp.deptno = dept.deptno  
GROUP BY dept.DNAME;
```



Query to find emp manager name and his manager for employees working in India

```
USE Hexaware;
SELECT e1.empno AS Empno,
e1.ename AS Ename,
DENSE_RANK() OVER(ORDER BY e1.ename) AS ManagerNo,
e2.ename AS Manager_Name,
e2.empno AS "Manager's Manager ID",
e3.ename AS "Manager's Manager Name",
l.Country AS Country_Name
FROM emp e1
INNER JOIN emp e2 ON e1.mgr = e2.empno
INNER JOIN emp e3 ON e2.mgr = e3.empno
INNER JOIN dept dept ON e1.deptno = dept.deptno
INNER JOIN loc l ON l.LOC_ID = dept.LOC_ID
WHERE l.Country = 'India';
```

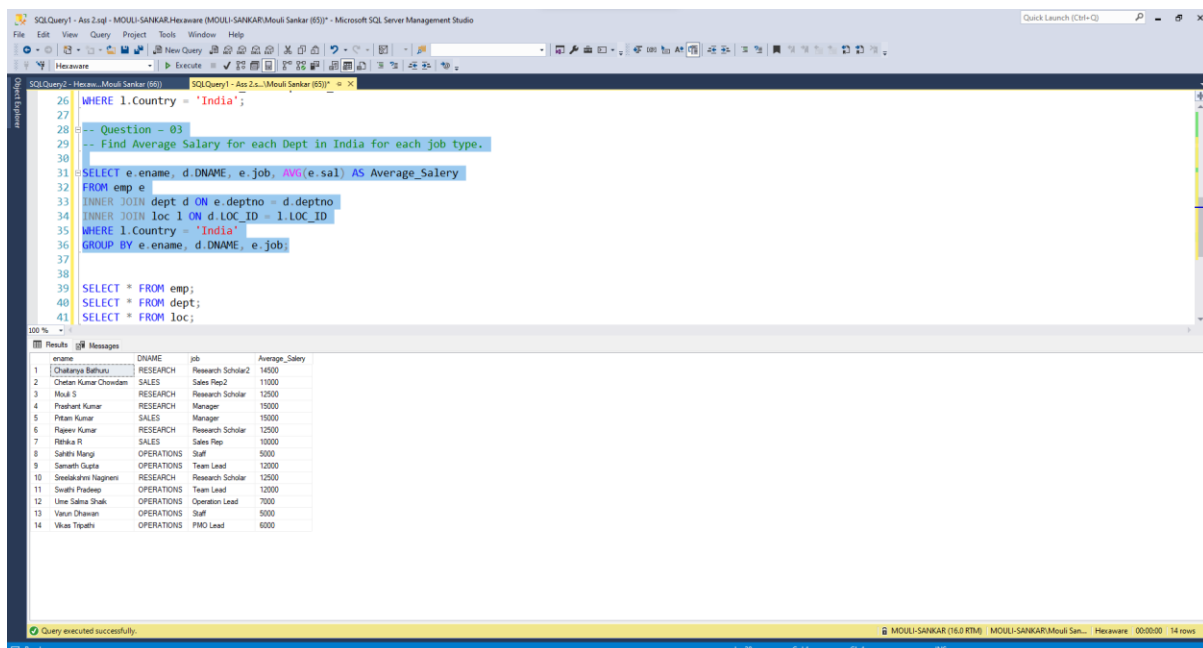


Question – 03

Find Average Salary for each Dept in India for each job type.

Query:

```
SELECT e.ename, d.DNAME, e.job, AVG(e.sal) AS  
Average_Salary  
FROM emp e  
INNER JOIN dept d ON e.deptno = d.deptno  
INNER JOIN loc l ON d.LOC_ID = l.LOC_ID  
WHERE l.Country = 'India'  
GROUP BY e.ename, d.DNAME, e.job;
```



The screenshot displays the Microsoft SQL Server Enterprise Manager interface. The top pane shows a query window with the following SQL code:

```
26 WHERE l.Country = 'India';  
27  
28 -- Question - 03  
29 -- Find Average Salary for each Dept in India for each job type.  
30  
31 SELECT e.ename, d.DNAME, e.job, AVG(e.sal) AS Average_Salary  
32 FROM emp e  
33 INNER JOIN dept d ON e.deptno = d.deptno  
34 INNER JOIN loc l ON d.LOC_ID = l.LOC_ID  
35 WHERE l.Country = 'India'  
36 GROUP BY e.ename, d.DNAME, e.job;  
37  
38  
39 SELECT * FROM emp;  
40 SELECT * FROM dept;  
41 SELECT * FROM loc;
```

The bottom pane shows the results of the query, displaying a table with the following columns: ename, DNAME, job, and Average_Salary. The table contains 14 rows of data.

ename	DNAME	job	Average_Salary
Challara Bhattu	RESEARCH	Research Scholar2	14000
Chetan Kumar Choudhan	SALES	Sales Rep2	11000
Mouli S	RESEARCH	Research Scholar	12500
Prashant Kumar	RESEARCH	Manager	15000
Pritam Kumar	SALES	Manager	15000
Rajeev Kumar	RESEARCH	Research Scholar	12500
Rishika R	SALES	Sales Rep	10000
Sahithi Mangi	OPERATIONS	Staff	9000
Samarth Gupta	OPERATIONS	Team Lead	12000
Smriti Arun Nagmani	RESEARCH	Research Scholar	12500
Swathi Pradeep	OPERATIONS	Team Lead	12000
Ume Salma Shaik	OPERATIONS	Operation Lead	7000
Varun Dhanan	OPERATIONS	Staff	9000
Vikram Tejapathi	OPERATIONS	PMO Lead	6000

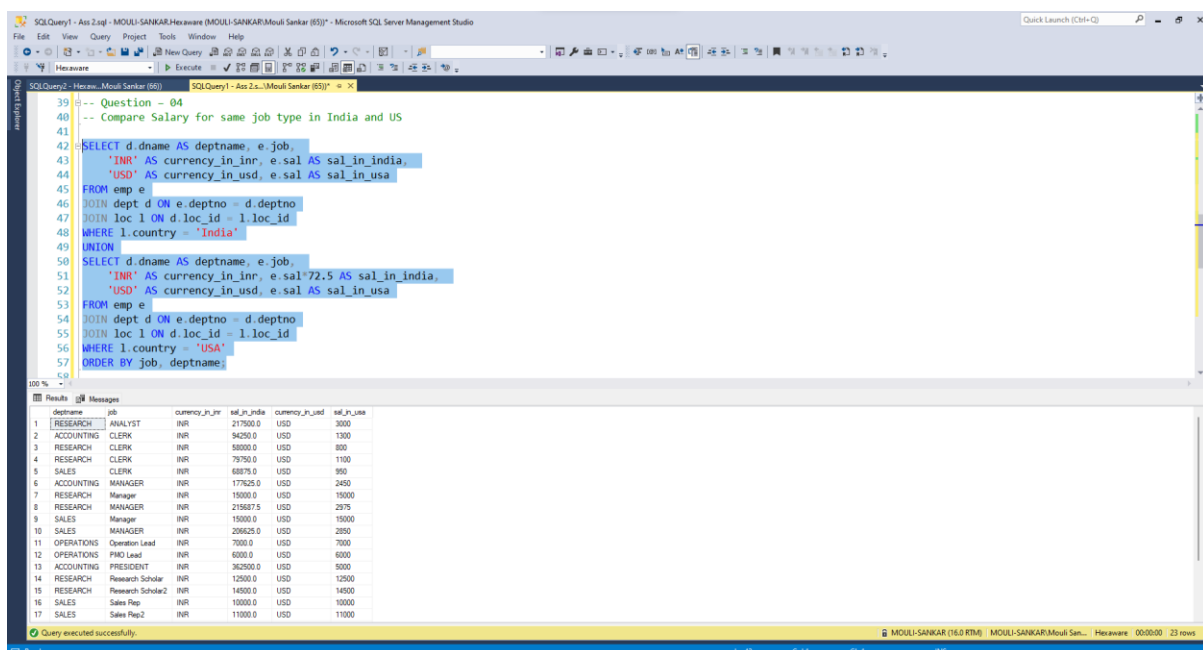
The status bar at the bottom indicates that the query was executed successfully.

Question – 04

Compare Salary for same job type in India and US

Query:

```
SELECT d.dname AS deptname, e.job,
       'INR' AS currency_in_inr, e.sal AS sal_in_india,
       'USD' AS currency_in_usd, e.sal AS sal_in_usa
FROM emp e
JOIN dept d ON e.deptno = d.deptno
JOIN loc l ON d.loc_id = l.loc_id
WHERE l.country = 'India'
UNION
SELECT d.dname AS deptname, e.job,
       'INR' AS currency_in_inr, e.sal*72.5 AS sal_in_india,
       'USD' AS currency_in_usd, e.sal AS sal_in_usa
FROM emp e
JOIN dept d ON e.deptno = d.deptno
JOIN loc l ON d.loc_id = l.loc_id
WHERE l.country = 'USA'
ORDER BY job, deptname;
```



The screenshot shows a SQL Server Enterprise Manager window with a query executed successfully. The query compares salaries for the same job type in India and the USA. The results are displayed in a table with columns: deptname, job, currency_in_inr, sal_in_india, currency_in_usd, and sal_in_usa. The results are ordered by job and then by deptname.

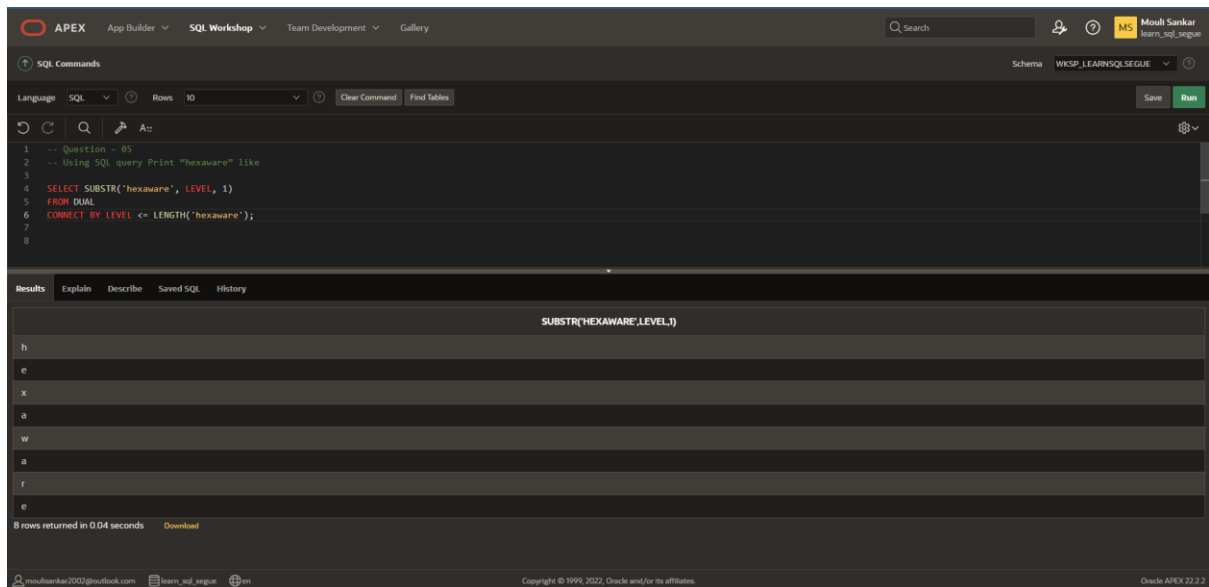
deptname	job	currency_in_inr	sal_in_india	currency_in_usd	sal_in_usa
RESEARCH	ANALYST	INR	21750.0	USD	3000
ACCOUNTING	CLERK	INR	94250.0	USD	1300
RESEARCH	CLERK	INR	58000.0	USD	800
RESEARCH	CLERK	INR	79750.0	USD	1100
SALES	CLERK	INR	68675.0	USD	950
ACCOUNTING	MANAGER	INR	177625.0	USD	2450
RESEARCH	Manager	INR	150000.0	USD	19000
RESEARCH	MANAGER	INR	215875.0	USD	2975
SALES	Manager	INR	150000.0	USD	19000
SALES	MANAGER	INR	206625.0	USD	2850
OPERATIONS	Operation Lead	INR	70000.0	USD	7000
OPERATIONS	PRO Lead	INR	60000.0	USD	6000
ACCOUNTING	PRESIDENT	INR	362500.0	USD	5000
RESEARCH	Research Scholar	INR	125000.0	USD	12500
RESEARCH	Research Scholar2	INR	145000.0	USD	14000
SALES	Sales Rep	INR	100000.0	USD	10000
SALES	Sales Rep2	INR	110000.0	USD	11000

Question – 05

Using SQL query Print “hexaware” like

Query:

```
SELECT SUBSTR('hexaware', LEVEL, 1)
FROM DUAL
CONNECT BY LEVEL <= LENGTH('hexaware');
```

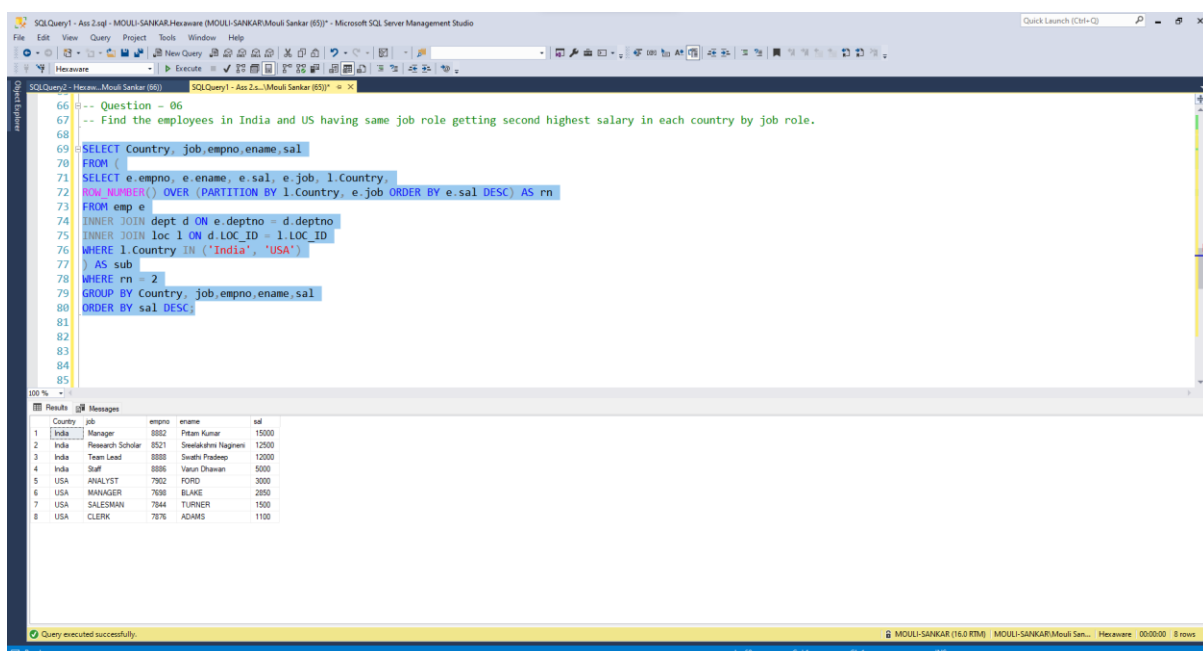


Question – 06

Find the employees in India and US having same job role getting second highest salary in each country by job role.

Query:

```
SELECT Country, job, empno, ename, sal
FROM (
SELECT e.empno, e.ename, e.sal, e.job, l.Country,
ROW_NUMBER() OVER (PARTITION BY l.Country, e.job ORDER BY
e.sal DESC) AS rn
FROM emp e
INNER JOIN dept d ON e.deptno = d.deptno
INNER JOIN loc l ON d.LOC_ID = l.LOC_ID
WHERE l.Country IN ('India', 'USA')
) AS sub
WHERE rn = 2
GROUP BY Country, job, empno, ename, sal
ORDER BY sal DESC;
```



The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The top pane displays a SQL query for finding employees in India and the USA with the second highest salary in each country by job role. The bottom pane shows the results of the query, which are displayed in a table with 8 rows and 5 columns: Country, job, empno, ename, and sal.

	Country	job	empno	ename	sal
1	India	Manager	8802	Pritam Kumar	15000
2	India	Research Scholar	8521	Sreelakshmi Nagesh	12500
3	India	Team Lead	8888	Srinathi Pradeep	12000
4	India	Staff	8886	Venur Chaitanyan	5000
5	USA	ANALYST	7902	FORD	3000
6	USA	MANAGER	7690	BLAKE	2850
7	USA	SALESMAN	7844	TURNER	1500
8	USA	CLERK	7876	ADAMS	1100