

Q1

SQLQuery3.sql - LAB.....24L-0583 (sa (54))\* X LAB15-03.24L-0583 - dbo.employee

```
--- Q1
SELECT * FROM employee
ORDER BY fname, lname;
```

214 %

Results Messages

	fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
1	Chris	E	Davis	321654987	1988-05-05	654 Maple St	M	65000.00	987654321	5
2	David	G	Taylor	951357486	1983-07-07	135 Birch St	M	52000.00	159753486	7
3	Emily	B	Jones	456123789	1985-03-03	789 Oak St	F	55000.00	123456789	3
4	Ethan	I	Thomas	852741963	1995-09-09	246 Walnut St	M	56000.00	753951486	9
5	Jane	A	Doe	987654321	1990-02-02	456 Elm St	F	60000.00	123456789	2
6	John	D	Smith	123456789	1980-01-01	123 Main St	M	50000.00	NULL	1
7	Michael	C	Brown	789456123	1975-04-04	321 Pine St	M	75000.00	987654321	4
8	Olivia	J	Moore	654852963	1994-10-10	579 Chestnut St	F	62000.00	753951486	10
9	Sara	F	Wilson	159753486	1992-06-06	987 Spruce St	F	47000.00	456123789	6
10	Sophia	H	Anderson	753951486	1991-08-08	864 Cedar St	F	48000.00	951357486	8

## Q2

Solution.sql - LAB1...3.24L-0583 (sa (54))\* X LAB15-03.24L-0583 - dbo.employee

```
-- Q1
SELECT * FROM employee
ORDER BY fname, lname;

-- Q2
SELECT fname from employee
WHERE salary >= 50000;
```

214 %

Results Messages

	fname
1	John
2	Chris
3	Emily
4	Olivia
5	Michael
6	Ethan
7	David
8	Jane

### Q3

LAB15-03.24L-0583 - dbo.department    Solution.sql - LAB1...3.24L-0583 (sa (54))\*

```
ORDER BY fname, lname;

-- Q2
SELECT fname from employee
WHERE salary >= 50000;

-- Q3
SELECT * FROM department
JOIN dept_locations
ON department.dnumber = dept_locations.dnumber
WHERE dname = 'HR';
```

214 %

Results    Messages

	dname	dnumber	mgrssn	mgrstartdate	dnumber	dlocation
1	HR	1	123456789	2023-01-01	1	Chicago
2	HR	1	123456789	2023-01-01	1	New York

#### Q4

LAB15-03.24L-0583 - dbo.department    Solution.sql - LAB1...3.24L-0583 (sa (54))

```
-- Q3
SELECT * FROM department
JOIN dept_locations
ON department.dnumber = dept_locations.dnumber
WHERE dname = 'HR';

-- Q4
SELECT salary, dno FROM employee
WHERE sex = 'F';
```

214 %

Results    Messages

	salary	dno
1	47000.00	6
2	55000.00	3
3	62000.00	10
4	48000.00	8
5	60000.00	2

## Q5

LAB15-03.24L-0583 - dbo.department    Solution.sql - LAB1...3.24L-0583 (sa (54))\*

```
-- Q4
SELECT salary, dno FROM employee
WHERE sex = 'F';

-- Q5
SELECT fname from employee
WHERE salary >= 4000 AND salary <= 50000;
```

214 %

Results    Messages

	fname
1	John
2	Sara
3	Sophia

## Q6

The screenshot shows a SQL IDE with two queries and their results. The top query, labeled -- Q5, is a SELECT statement that filters employees by salary. The bottom query, labeled -- Q6, is a SELECT DISTINCT statement that filters employees by department number (dno). The results pane at the bottom shows the output of the Q6 query, which is a single row with the name 'Chris'.

```
-- Q5
SELECT fname from employee
WHERE salary >= 4000 AND salary <= 50000;

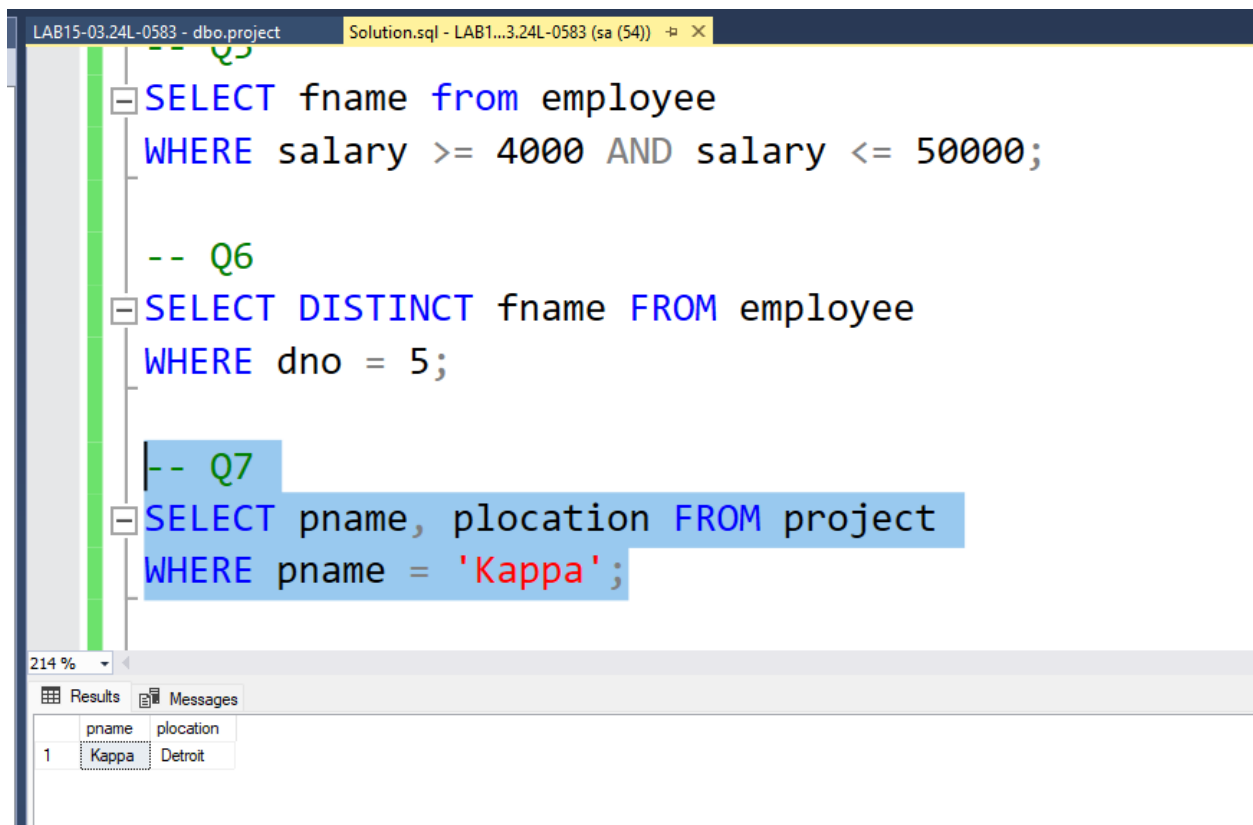
-- Q6
SELECT DISTINCT fname FROM employee
WHERE dno = 5;
```

Results

	fname
1	Chris

## Q7

Before Query:



```
-- Q5
SELECT fname from employee
WHERE salary >= 4000 AND salary <= 50000;

-- Q6
SELECT DISTINCT fname FROM employee
WHERE dno = 5;

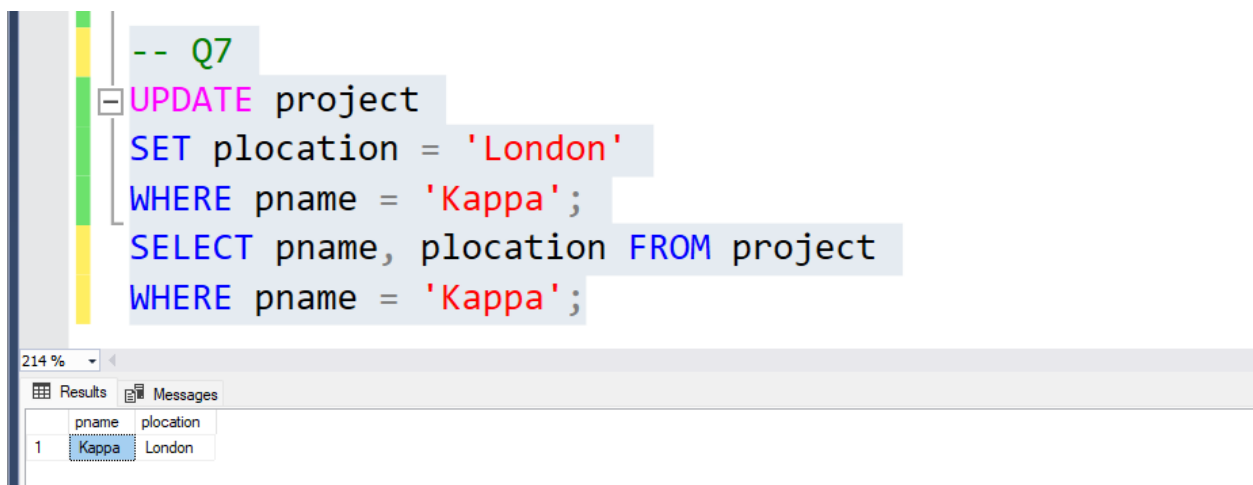
-- Q7
SELECT pname, plocation FROM project
WHERE pname = 'Kappa';
```

214 %

Results Messages

	pname	plocation
1	Kappa	Detroit

After Query:



```
-- Q7
UPDATE project
SET plocation = 'London'
WHERE pname = 'Kappa';
SELECT pname, plocation FROM project
WHERE pname = 'Kappa';
```

214 %

Results Messages

	pname	plocation
1	Kappa	London

## Q8

### Before Query:

```
-- Q8
SELECT * FROM project;
```

214 %

Results Messages

	pname	pnumber	plocation	dnum
1	Alpha	1	New York	1
2	Beta	2	Los Angeles	2
3	Gamma	3	San Francisco	3
4	Delta	4	Seattle	4
5	Epsilon	5	Austin	5
6	Zeta	6	Atlanta	6
7	Eta	7	Phoenix	7
8	Theta	8	San Diego	8
9	Iota	9	Orlando	9
10	Kappa	10	London	10

### Query:

```
-- Q8
DELETE FROM project
WHERE pname = 'Iota';
```

214 %

Messages

(1 row affected)

Completion time: 2026-02-20T10:00:50.0284793+05:00

### After Query:

```
SELECT * FROM project;
```

214 %

Results Messages

	pname	pnumber	plocation	dnum
1	Alpha	1	New York	1
2	Beta	2	Los Angeles	2
3	Gamma	3	San Francisco	3
4	Delta	4	Seattle	4
5	Epsilon	5	Austin	5
6	Zeta	6	Atlanta	6
7	Eta	7	Phoenix	7
8	Theta	8	San Diego	8
9	Kappa	10	London	10



## Q9

LAB15-03.24L-0583 - dbo.project    Solution.sql - LAB1...3.24L-0583 (sa (54))

```
-- Q9
DELETE FROM project
WHERE pname = 'Iota';

-- Q9
SELECT fname, lname FROM employee
EXCEPT
SELECT fname, lname FROM employee
WHERE dno = 7;
```

214 %

Results    Messages

	fname	lname
1	Chris	Davis
2	Emily	Jones
3	Ethan	Thomas
4	Jane	Doe
5	John	Smith
6	Michael	Brown
7	Olivia	Moore
8	Sara	Wilson
9	Sophia	Anderson

## Q10

### Before Query:

```
-- Q10
SELECT lname, salary
FROM employee;
```

214 %

	lname	salary
1	Smith	50000.00
2	Wilson	47000.00
3	Davis	65000.00
4	Jones	55000.00
5	Moore	62000.00
6	Anderson	48000.00
7	Brown	75000.00
8	Thomas	56000.00
9	Taylor	52000.00
10	Doe	60000.00

### Query:

```
-- Q10
UPDATE employee
SET salary = 51000
WHERE lname = 'Wilson';
```

214 %

Messages

(1 row affected)

Completion time: 2026-02-20T10:04:23.2135030+05:00

### After Query:

```
-- Q10
SELECT lname, salary
FROM employee;
```

214 %

	lname	salary
1	Smith	50000.00
2	Wilson	51000.00
3	Davis	65000.00
4	Jones	55000.00
5	Moore	62000.00
6	Anderson	48000.00
7	Brown	75000.00
8	Thomas	56000.00
9	Taylor	52000.00
10	Doe	60000.00

## Q11

### Before Query:

```
-- Q11
SELECT dno, salary FROM employee;
```

214 %

Results Messages

	dno	salary
1	1	50000.00
2	6	51000.00
3	5	65000.00
4	3	55000.00
5	10	62000.00
6	8	48000.00
7	4	75000.00
8	9	56000.00
9	7	52000.00
10	2	60000.00

### Query:

```
-- Q11
UPDATE employee
SET salary = salary * 1.10
WHERE dno = 4;
```

%

Messages

(1 row affected)

Completion time: 2026-02-20T10:07:54.5629937+05:00

### After Query:

```
SELECT dno, salary FROM employee;
```

214 %

Results Messages

	dno	salary
1	1	50000.00
2	6	51000.00
3	5	65000.00
4	3	55000.00
5	10	62000.00
6	8	48000.00
7	4	82500.00
8	9	56000.00
9	7	52000.00
10	2	60000.00

## Q12

The screenshot shows a SQL IDE interface. The top pane contains a SQL query for Q12. The bottom pane shows the results of the query, which is a list of 21 city names.

```
-- Q12
SELECT dlocation FROM dept_locations
UNION
SELECT plocation FROM project;
```

Results

	dlocation
1	Atlanta
2	Austin
3	Boston
4	Chicago
5	Cleveland
6	Dallas
7	Denver
8	Detroit
9	Houston
10	London
11	Los Angeles
12	Miami
13	New York
14	Orlando
15	Philadelphia
16	Phoenix
17	San Diego
18	San Francisco
19	San Jose
20	Seattle
21	Tampa

### Q13

```
-- Q13
SELECT dlocation FROM dept_locations
EXCEPT
SELECT plocation FROM project;
```

214 %

Results Messages

	dlocation
1	Boston
2	Chicago
3	Cleveland
4	Dallas
5	Denver
6	Detroit
7	Houston
8	Miami
9	Orlando
10	Philadelphia
11	San Jose
12	Tampa

## Q14

The screenshot shows a SQL query editor window with the following content:

```
LAB15-03.24L-0583 - dbo.project | Solution.sql - LAB1...3.24L-0583 (sa (54))  
  
SELECT plocation FROM project;  
  
-- Q14  
SELECT dlocation FROM dept_locations  
INTERSECT  
SELECT plocation FROM project;
```

Below the query editor, the results pane is visible, showing a table with the following data:

	dlocation
1	Atlanta
2	Austin
3	Los Angeles
4	New York
5	Phoenix
6	San Diego
7	San Francisco
8	Seattle

## Q15

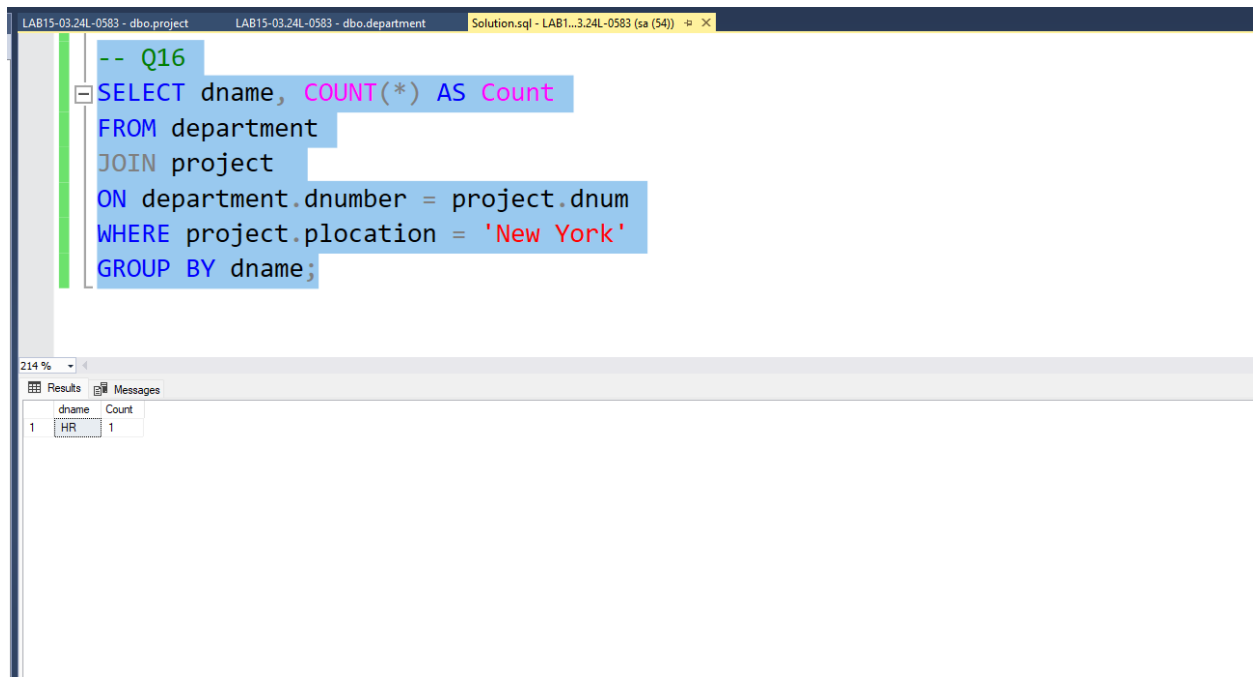
The screenshot shows a SQL query editor with three tabs: 'LAB15-03.24L-0583 - dbo.department', 'LAB15-03.24L-0583 - dbo.employee', and 'Solution.sql - LAB1...3.24L-0583 (sa (54))'. The query in the editor is:

```
-- Q15
SELECT fname, lname FROM employee
WHERE dno =
(SELECT dnumber FROM department
WHERE dname = 'HR');
```

Below the query editor, the 'Results' tab is active, displaying a table with the following data:

	fname	lname
1	John	Smith

## Q16



The screenshot shows a SQL IDE interface with a query editor and a results pane. The query editor contains the following SQL code:

```
-- Q16
SELECT dname, COUNT(*) AS Count
FROM department
JOIN project
ON department.dnumber = project.dnum
WHERE project.plocation = 'New York'
GROUP BY dname;
```

The results pane shows a table with two columns: dname and Count. The table contains one row with the value 'HR' in the dname column and 1 in the Count column.

dname	Count
HR	1



## Q17

LAB15-03.24L-0583 - dbo.works\_on LAB15-03.24L-0583 - dbo.employee LAB15-03.24L-0583 - dbo.project LAB15-03.24L-0583 - dbo.department Solution.sql - LAB15-03.24L-0583 (sa (54))

```
GROUP BY dname;  
  
-- Q17  
SELECT fname, lname, salary  
FROM employee  
WHERE ssn IN  
(SELECT essn FROM works_on  
WHERE hours >= 30);
```

214 %

Results Messages

	fname	lname	salary
1	Chris	Davis	65000.00
2	Olivia	Moore	62000.00
3	Michael	Brown	82500.00
4	Jane	Doe	60000.00

## Q18

LAB15-03.24L-0583 - dbo.dept\_locations    LAB15-03.24L-0583 - dbo.employee    Solution.sql - LAB15-03.24L-0583 (sa (54))

```
-- Q18
SELECT dnumber, dlocation AS 'Female Department Locations'
FROM dept_locations
WHERE dnumber NOT IN
(SELECT dno
FROM employee
WHERE sex = 'M');
```

214 %

Results    Messages

	dnumber	Female Department Locations
1	2	Houston
2	2	Los Angeles
3	3	Boston
4	3	San Francisco
5	6	Atlanta
6	6	Miami
7	8	San Diego
8	8	San Jose
9	10	Cleveland
10	10	Detroit

## Q19

SQL query editor showing the solution for Q19. The query is executed, and the results are displayed in the Results pane.

```
FROM employee
WHERE sex = 'M');

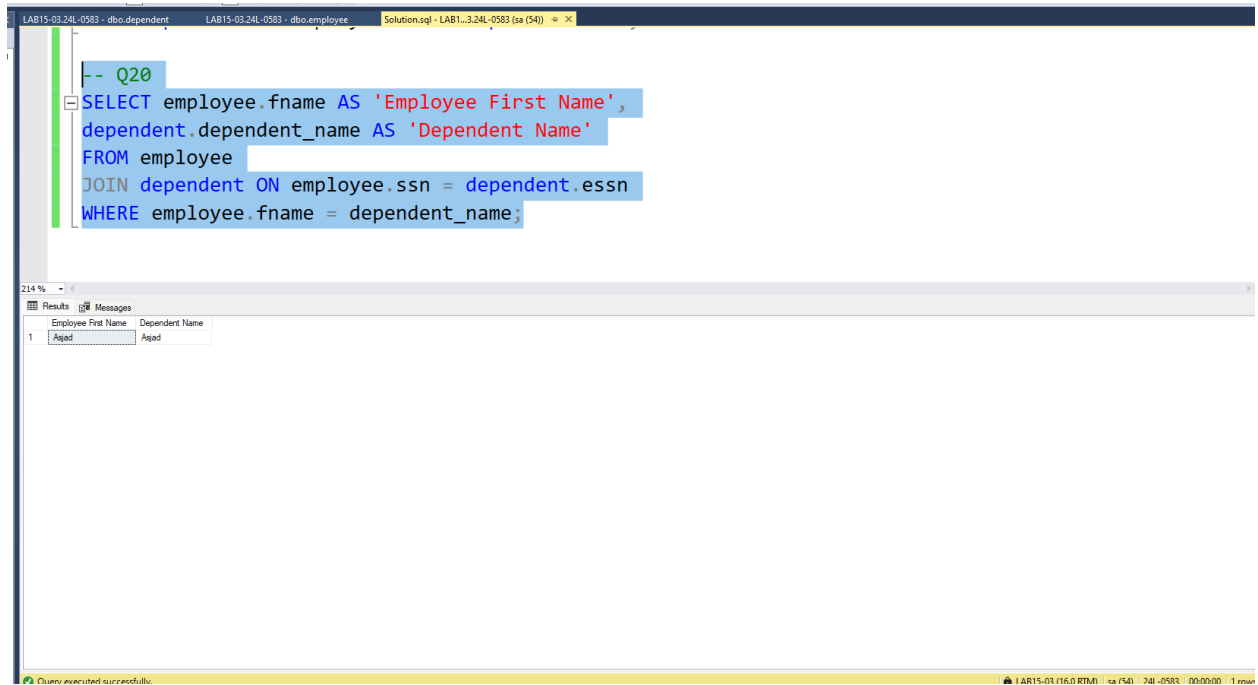
-- Q19
SELECT DISTINCT employee.fname AS 'Employee First Name',
dependent.dependent_name AS 'Dependent Name'
FROM employee
JOIN dependent ON employee.ssn = dependent.essn;
```

Results:

	Employee First Name	Dependent Name
1	Chris	Liam
2	David	Olive
3	Emily	Ella
4	Ethan	Sophia
5	Jane	Sam
6	John	Anna
7	John	Mark
8	Michael	Max
9	Sara	Emma
10	Sophia	Lucas

## Q20

There was no case of same employee name and dependent name in the given Data. So I added a case myself.



The screenshot shows a SQL Server Enterprise Manager window with a query editor and a results pane. The query editor contains the following SQL code:

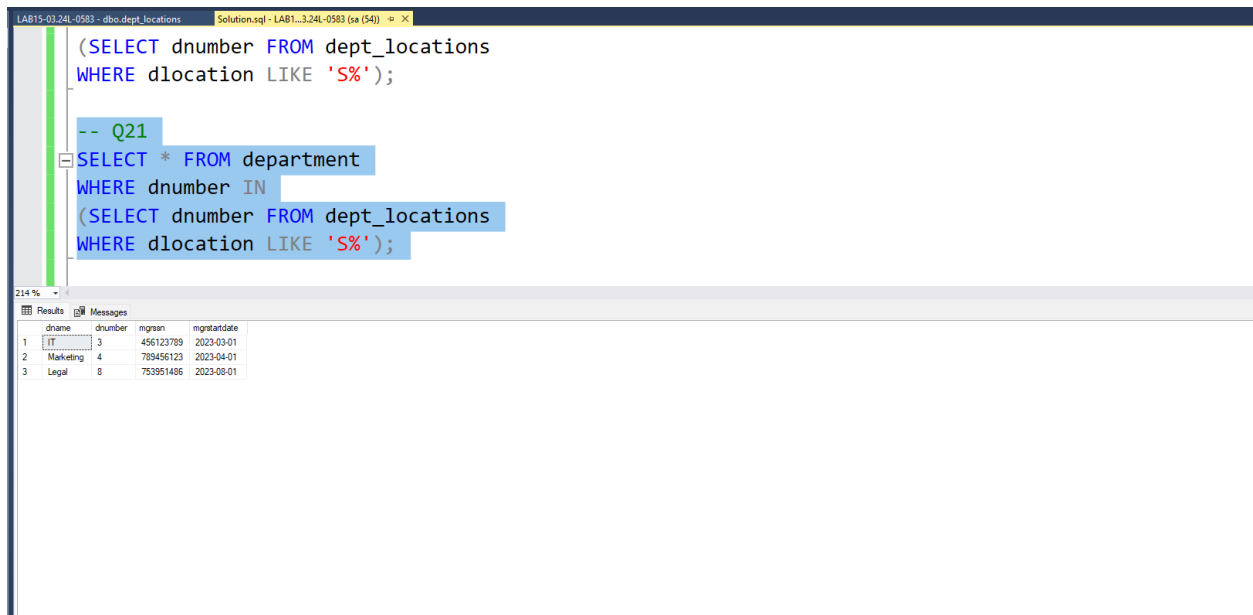
```
-- Q20
SELECT employee.fname AS 'Employee First Name',
       dependent.dependent_name AS 'Dependent Name'
FROM employee
JOIN dependent ON employee.ssn = dependent.essn
WHERE employee.fname = dependent_name;
```

The results pane shows a single row with the following data:

	Employee First Name	Dependent Name
1	Ajagad	Ajagad

The status bar at the bottom indicates "Query executed successfully." and "1 AB15-03 (16.0 RTM) | ca (54) | 741,0583 | 00:00:00 | 1 row".

## Q21



The screenshot shows a SQL IDE window with a query editor and a results pane. The query editor contains the following SQL code:

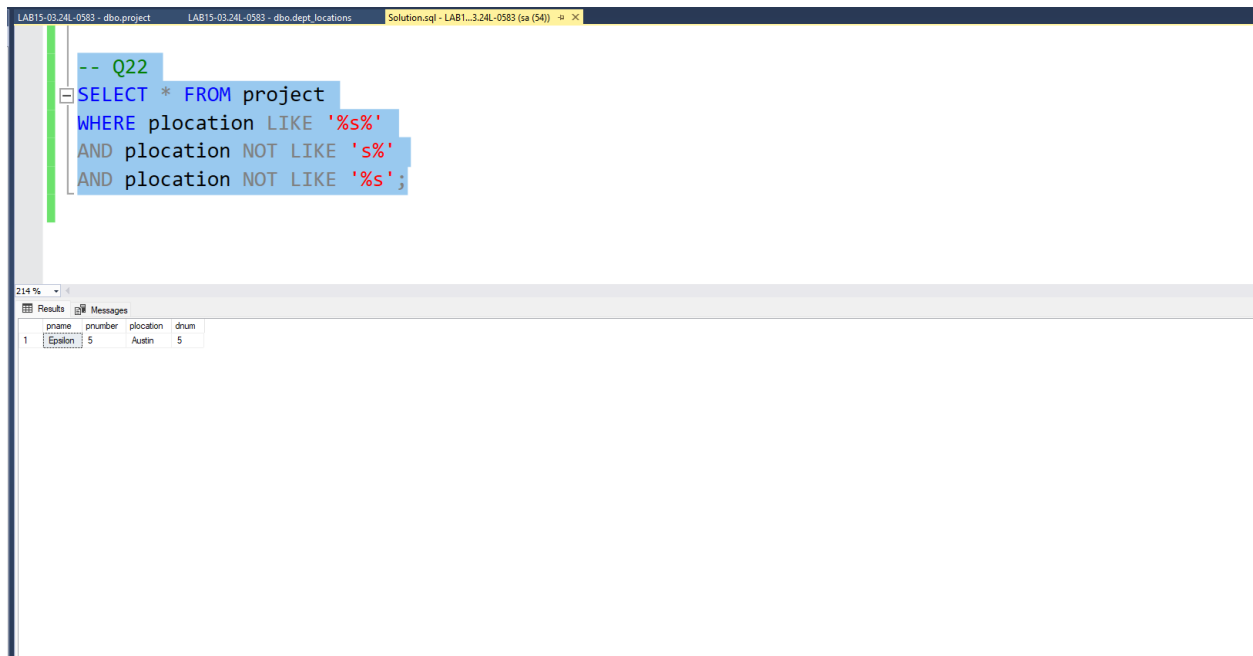
```
(SELECT dnumber FROM dept_locations
WHERE dlocation LIKE 'S%');

-- Q21
SELECT * FROM department
WHERE dnumber IN
(SELECT dnumber FROM dept_locations
WHERE dlocation LIKE 'S%');
```

The results pane displays a table with the following data:

	dname	dnumber	mgrsn	mgrstartdate
1	IT	3	456123789	2023-03-01
2	Marketing	4	789456123	2023-04-01
3	Legal	8	753951486	2023-08-01

## Q22



The screenshot shows a SQL IDE with three tabs: 'LAB15-03.24L-0583 - dbo.project', 'LAB15-03.24L-0583 - dbo.dept\_locations', and 'Solution.sql - LAB1...3.24L-0583 (sa (54))'. The active tab 'Solution.sql' contains the following SQL query:

```
-- Q22
SELECT * FROM project
WHERE plocation LIKE '%s%'
AND plocation NOT LIKE 's%'
AND plocation NOT LIKE '%s';
```

Below the query editor, the 'Results' pane shows a zoom level of 214% and a table with the following data:

	pname	pnumber	plocation	drum
1	Epsilon	5	Austin	5

## Practice Question

LAB15-03.24L-0583 - dbo.works\_on    LAB15-03.24L-0583 - dbo.dependent    LAB15-03.24L-0583 - dbo.employee    Solution.sql - LAB1...3.24L-0583 (sa (54))

```
-- Practice Question
SELECT employee.* FROM employee
JOIN dependent
ON employee.ssn = dependent.essn
WHERE employee.dno IN
(SELECT dnumber FROM department
WHERE dname = 'Finance'
OR dname = 'Marketing')
EXCEPT
SELECT employee.* FROM employee
JOIN dependent
ON employee.ssn = dependent.essn
WHERE employee.ssn IN
(SELECT essn FROM works_on
WHERE hours >= 20
AND hours <= 30);
```

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Results Messages

	fname	lname	ssn	bdate	address	sex	salary	superssn	dno	
1	Michael	C	Brown	1122	1975-04-04	321 Pine St	M	82500.00	987654321	4
2	Ajmad	Z	Raza	123	1990-02-12	2323 Lahore	M	600000.00	12345	4
3	Jane	A	Doe	9999	1990-02-02	456 Elm St	F	60000.00	123456789	2