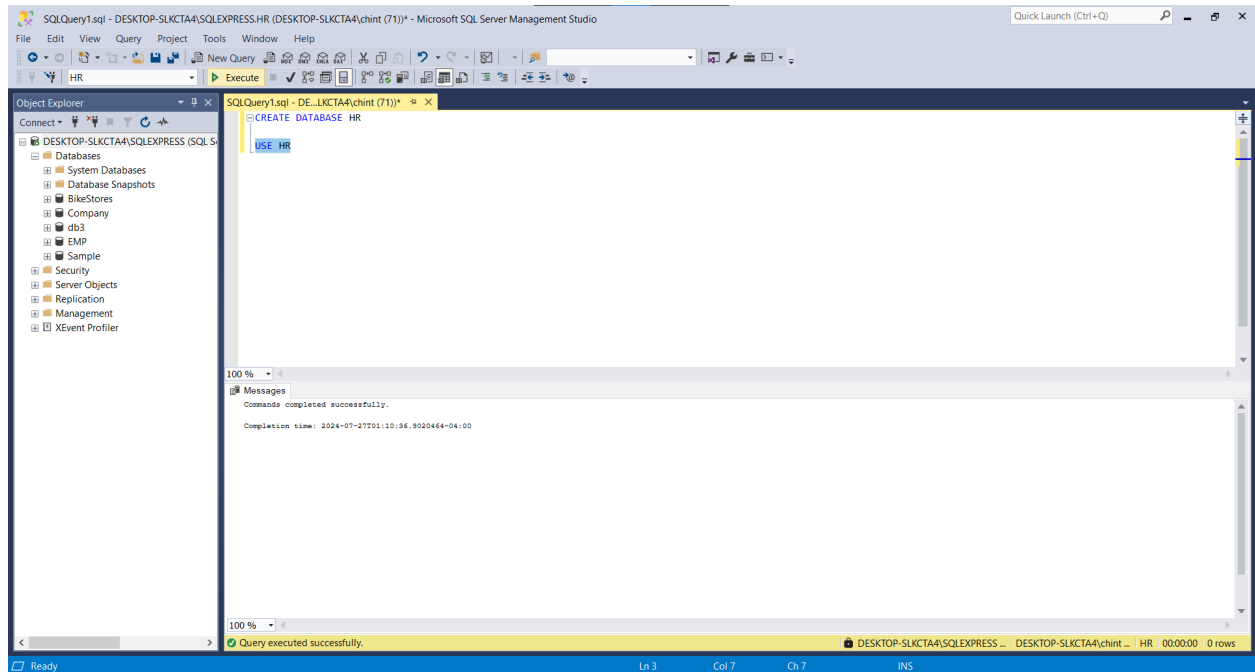
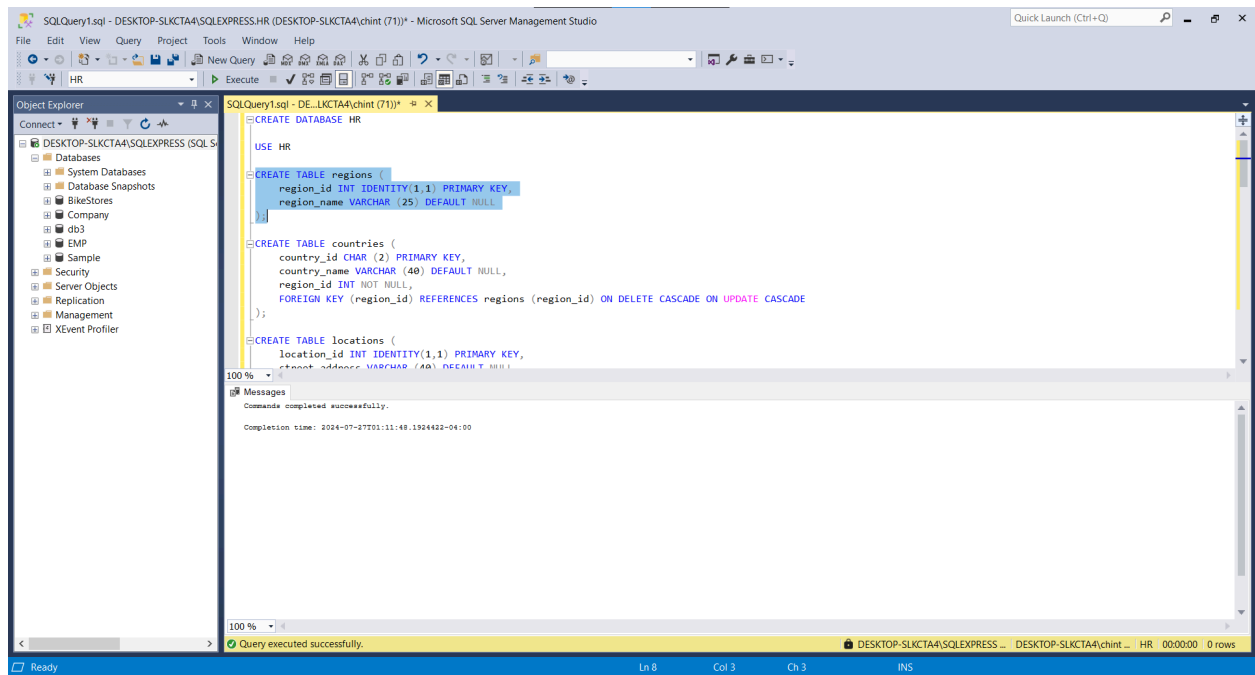


SQL PROJECT

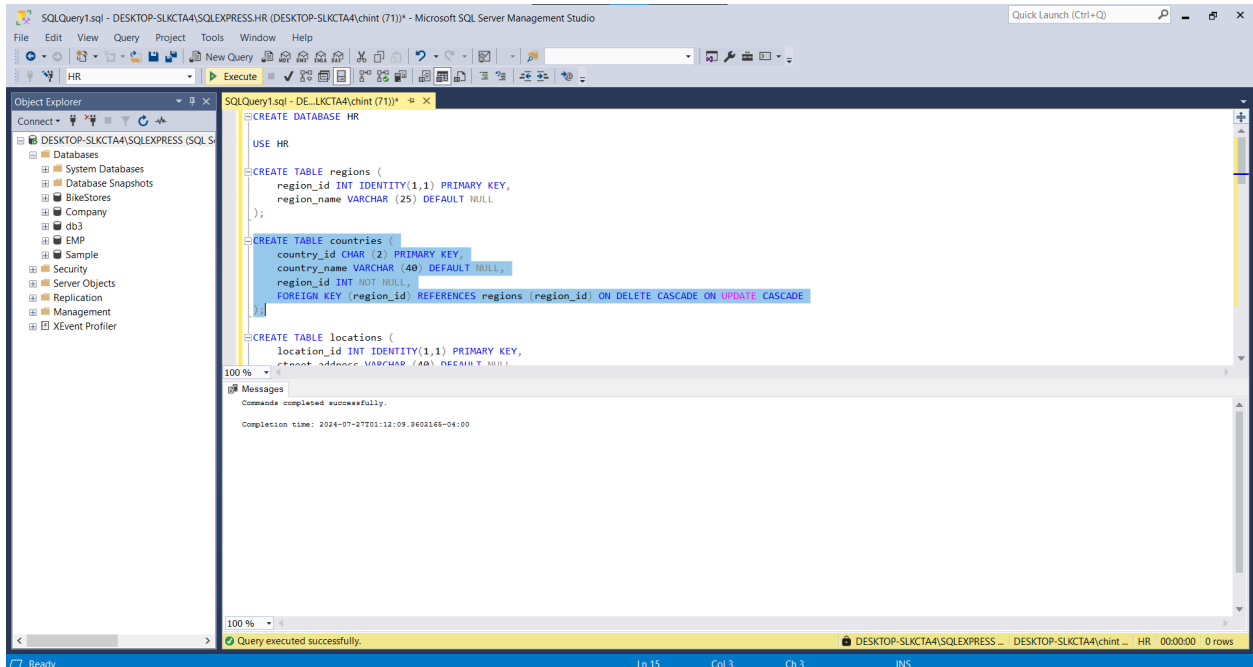
Question: Create database HR.



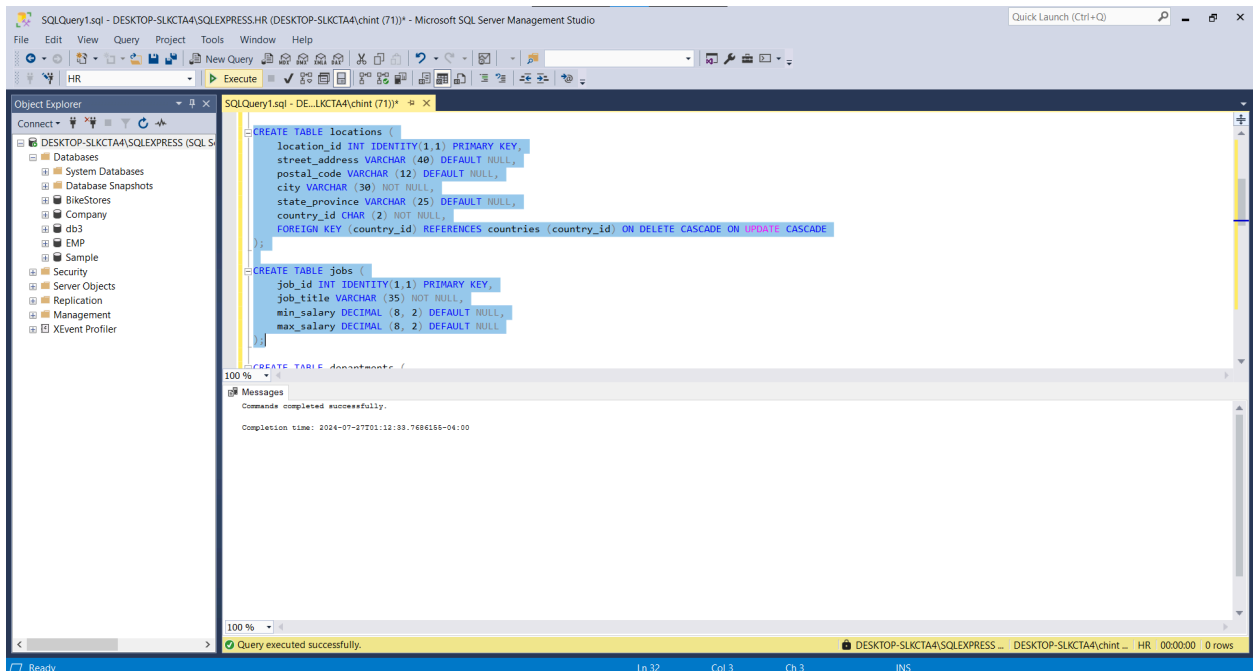
Question: Create 7 tables and load data into it.



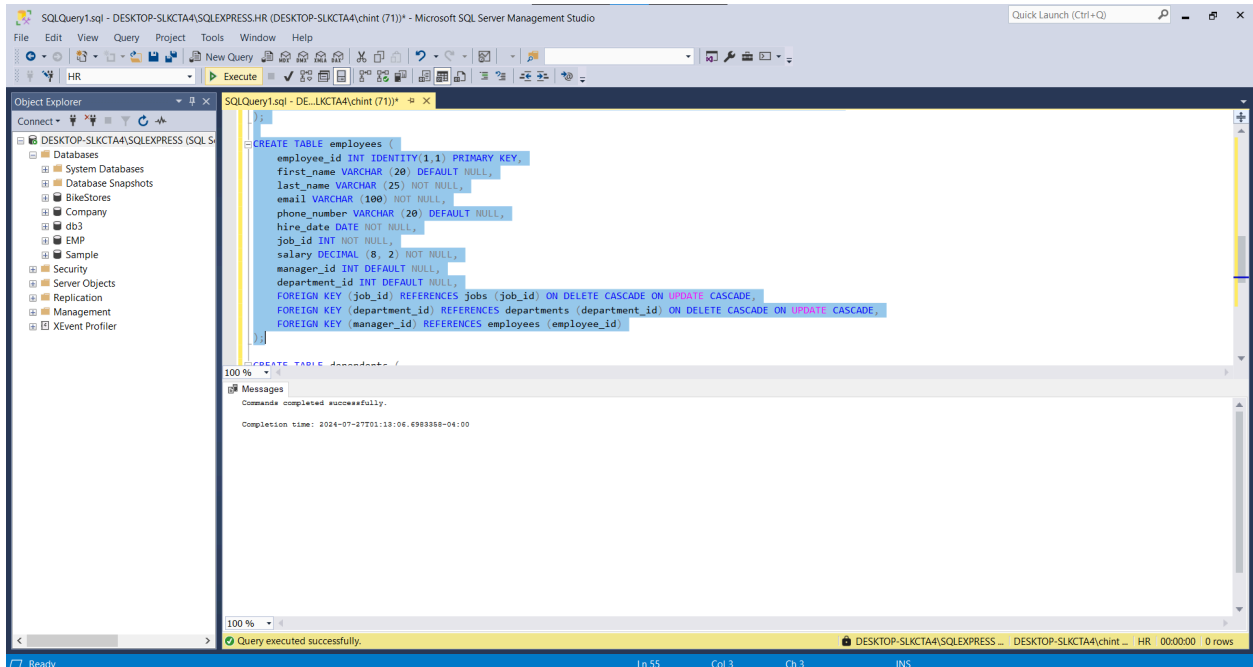
Creating REGION Table



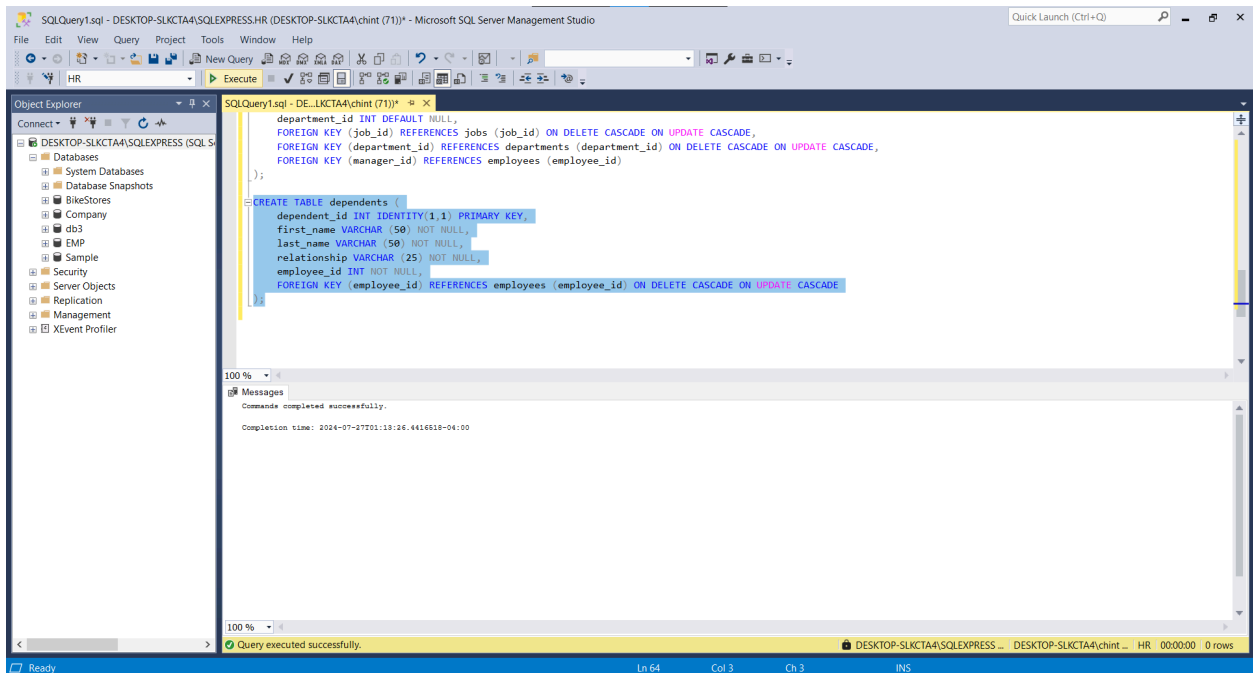
Creating COUNTRIES Table



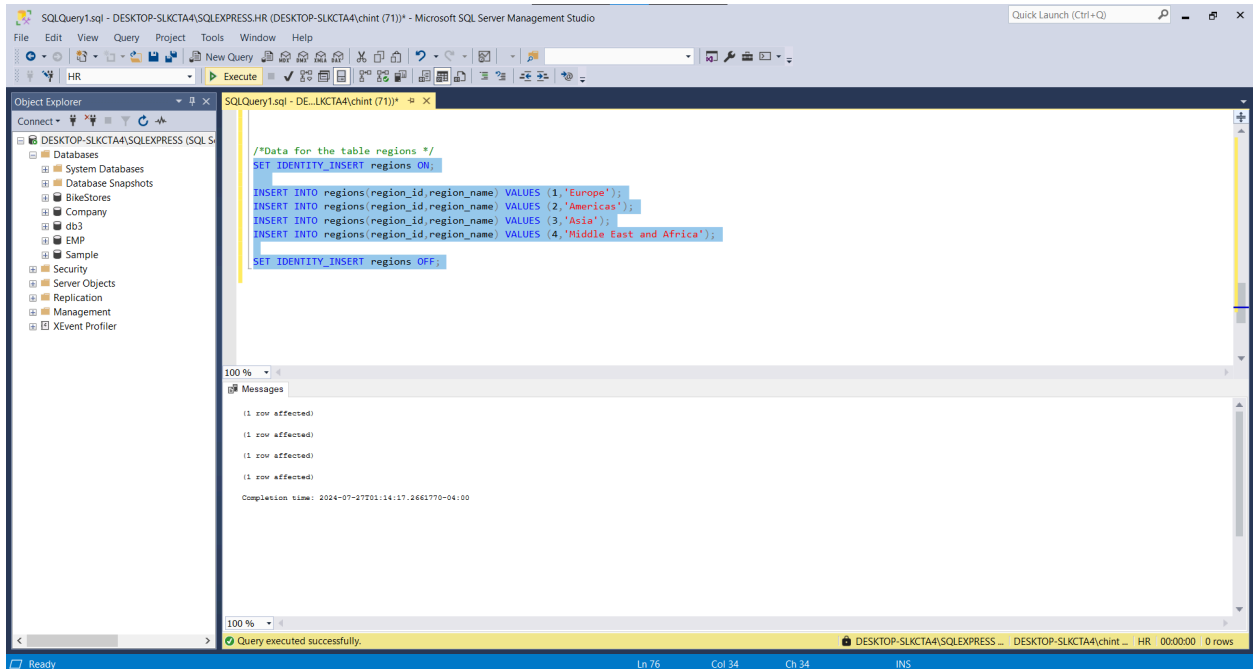
Creating LOCATIONS & JOBS Table



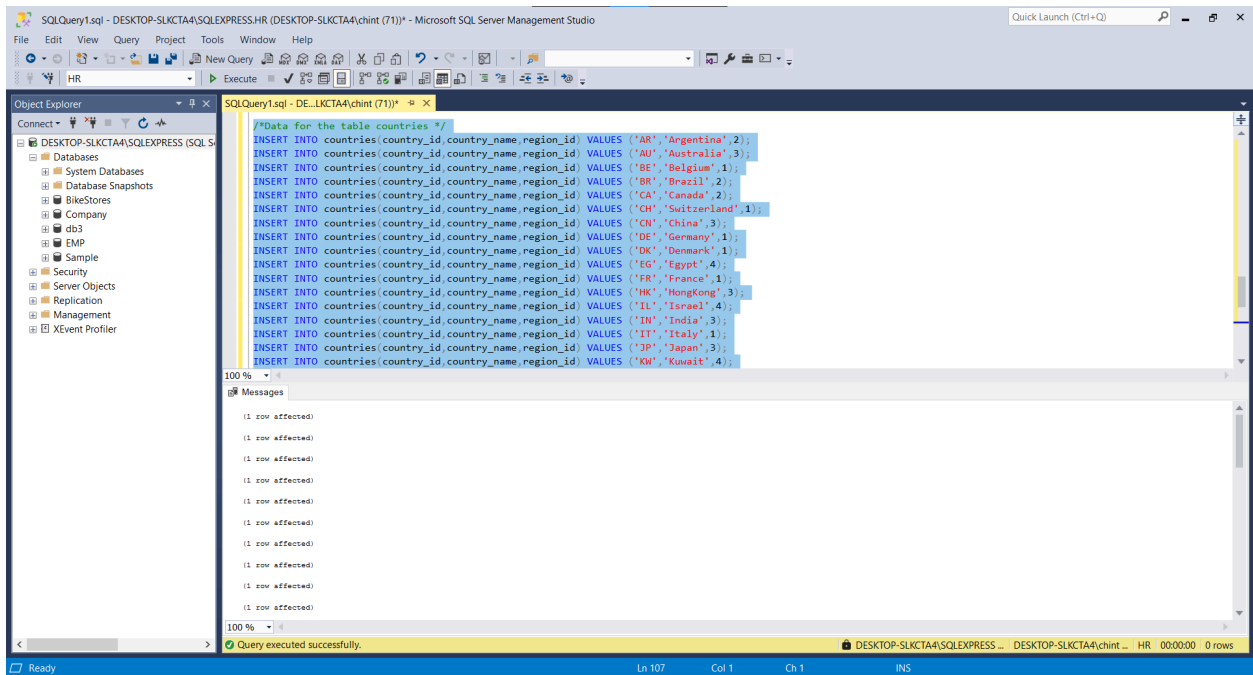
Creating EMPLOYEES Table



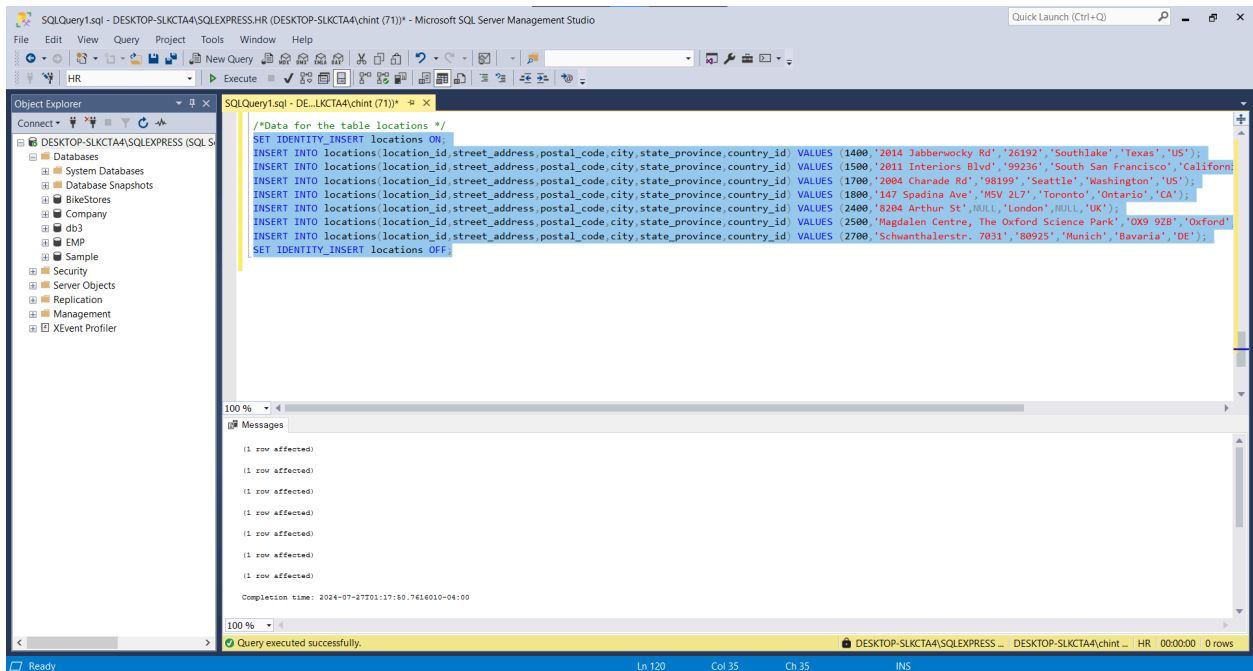
Creating DEPARTMENTS Table



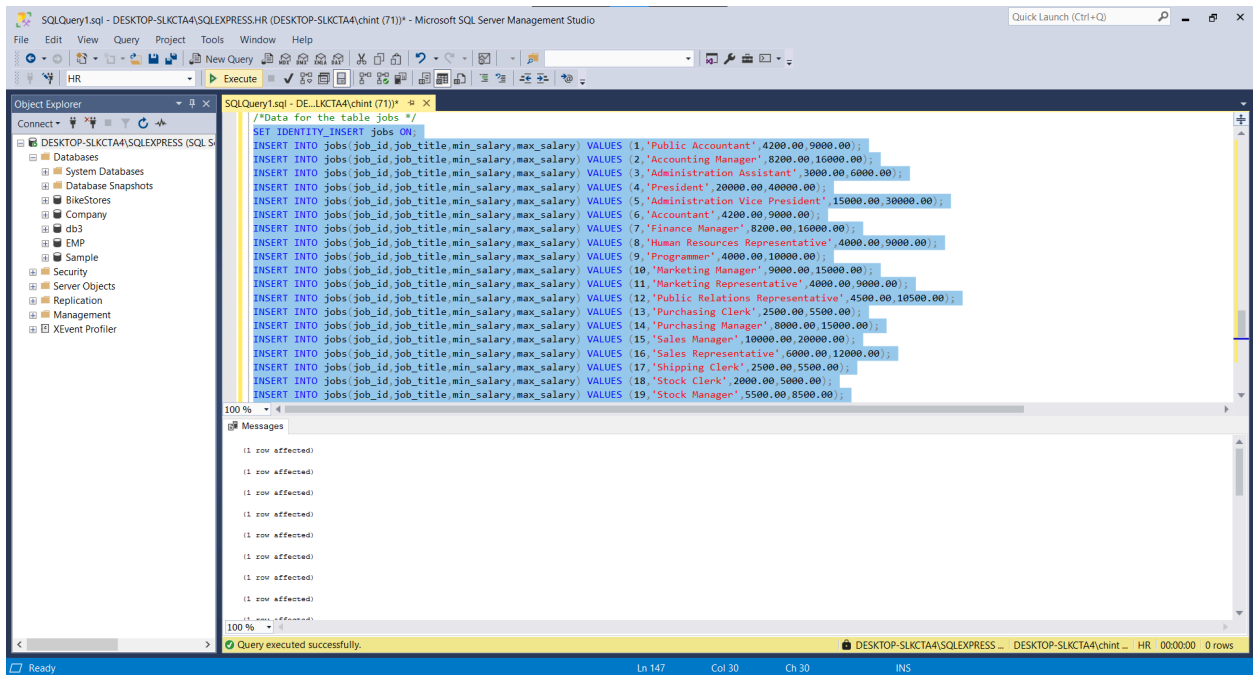
Loading data into REGION Table



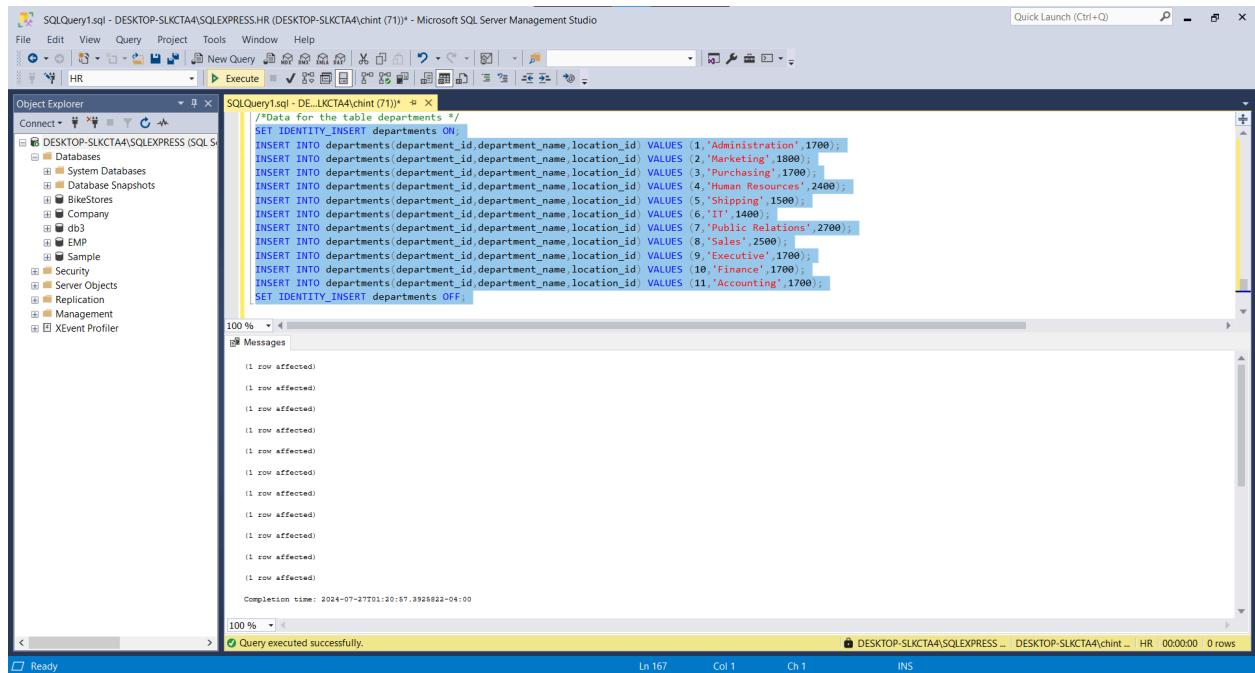
Loading data into COUNTRIES Table



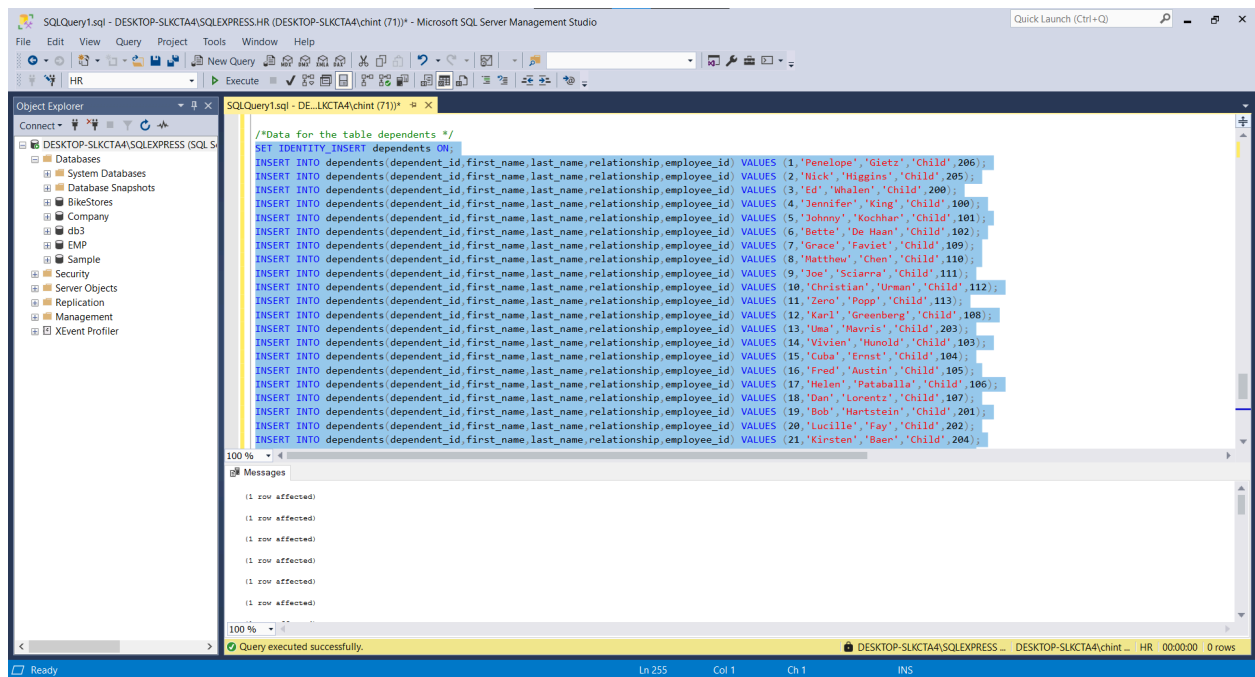
Loading data into LOCATIONS Table



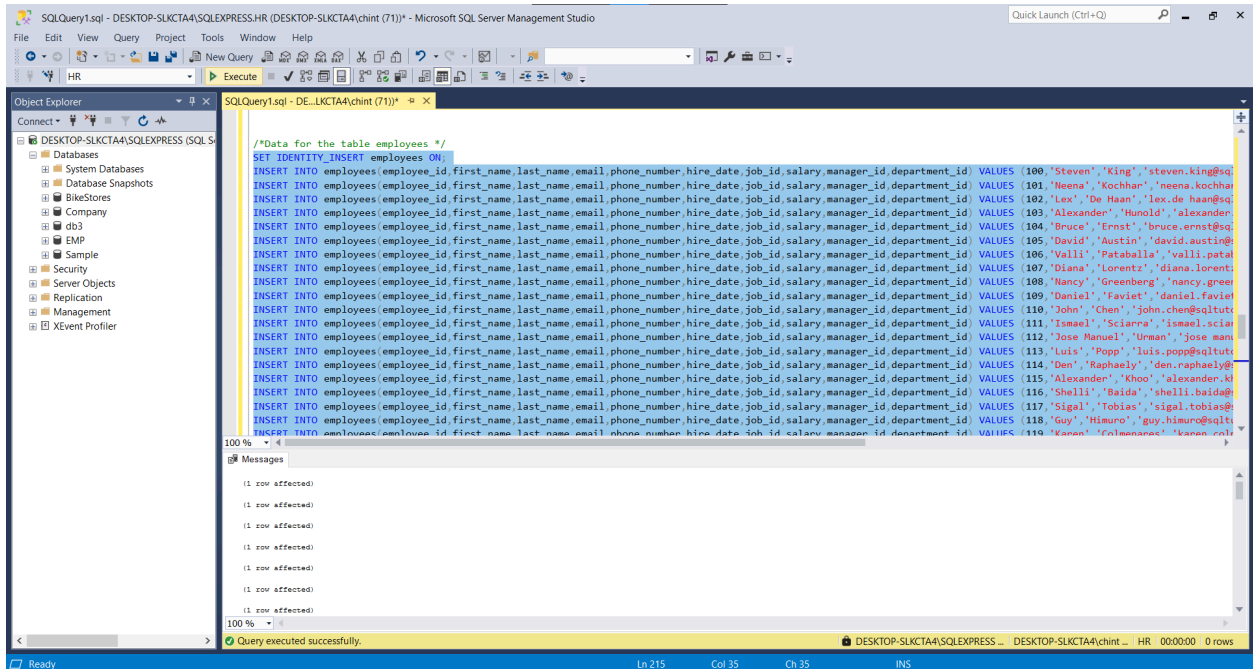
Loading data into JOBS Table



Loading data into DEPARTMENTS Table



Loading data into DEPENDANTS Table

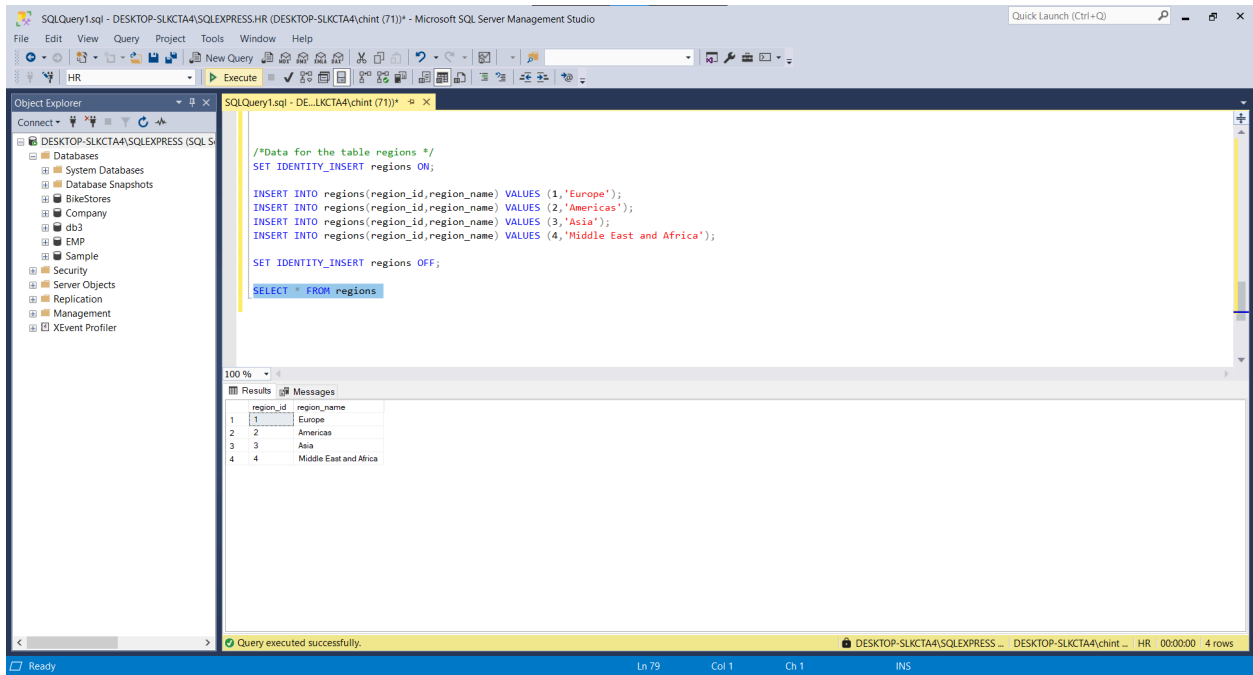


Loading data into EMPLOYEES Table

SQL Queries

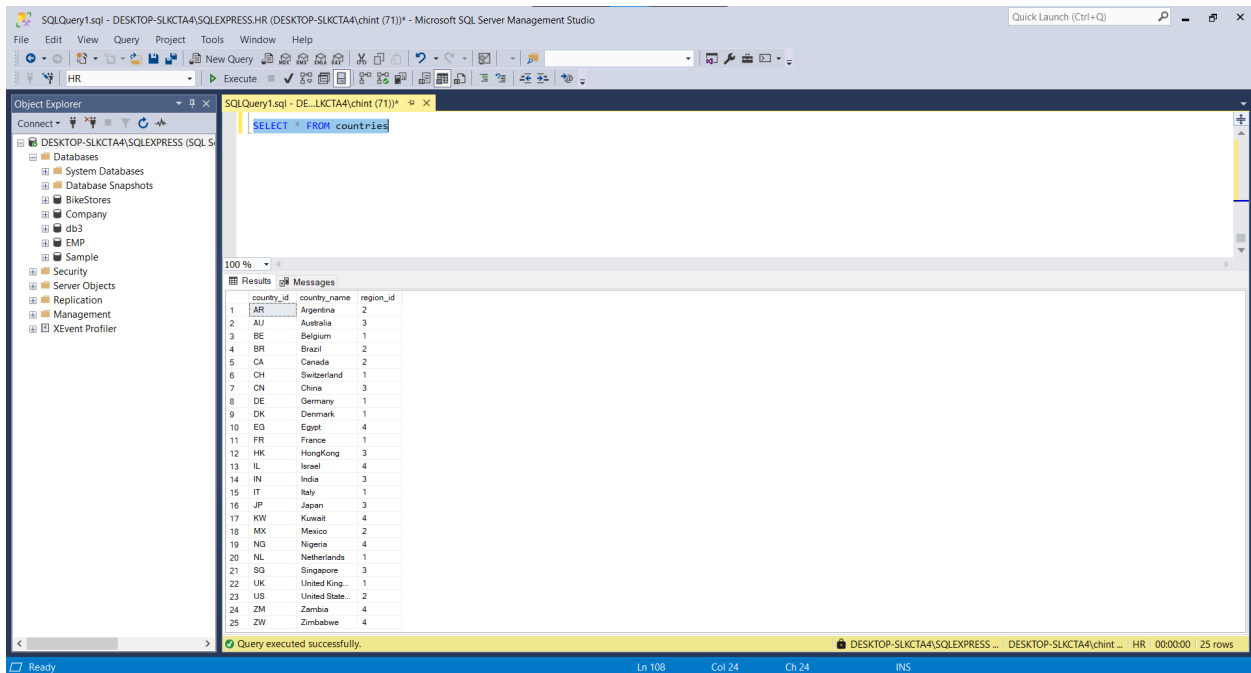
Query 1: Display all records of table regions.

- 4 rows



Query 2: Display all records of table countries

- 25 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: `SELECT * FROM countries`

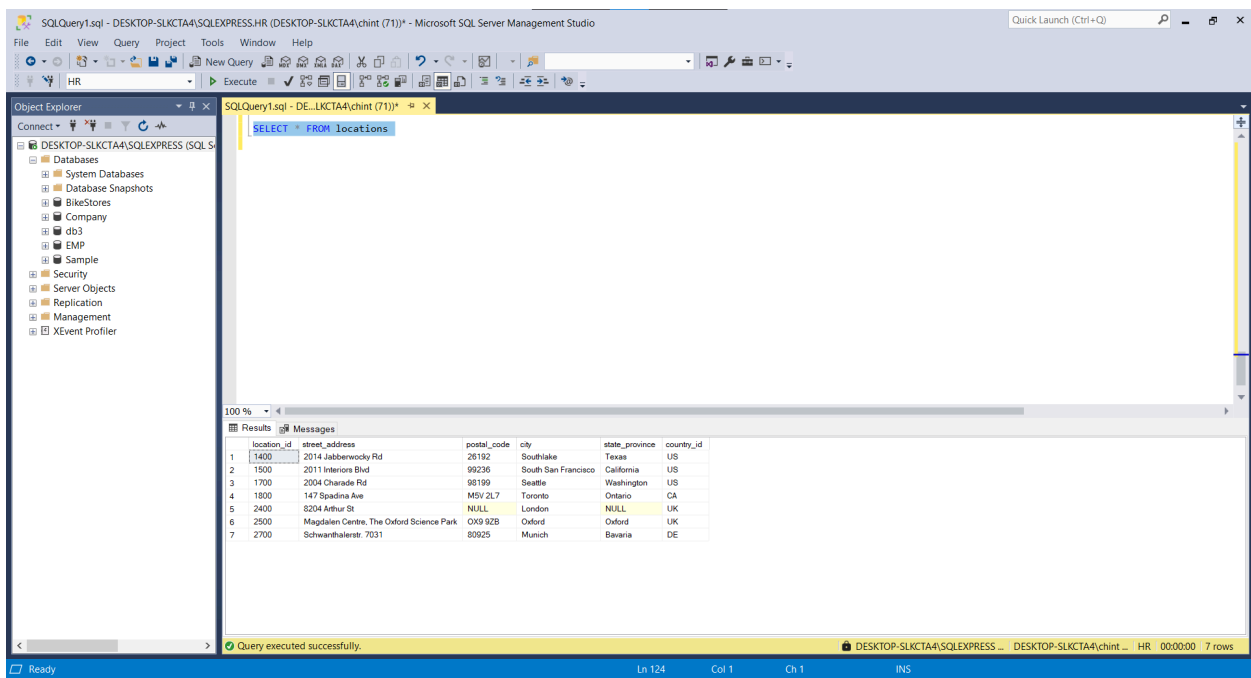
Results:

country_id	country_name	region_id
AR	Argentina	2
AU	Australia	3
BE	Belgium	1
BR	Brazil	2
CA	Canada	2
CH	Switzerland	1
CN	China	3
DE	Germany	1
DK	Denmark	1
EG	Egypt	4
FR	France	1
HK	HongKong	3
IL	Israel	4
IN	India	3
IT	Italy	1
JP	Japan	3
KW	Kuwait	4
MX	Mexico	2
NG	Nigeria	4
NL	Netherlands	1
SQ	Singapore	3
UK	United King...	1
US	United State...	2
ZM	Zambia	4
ZW	Zimbabwe	4

Query executed successfully.

Query 3: Display all records of table locations

- 7 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: `SELECT * FROM locations`

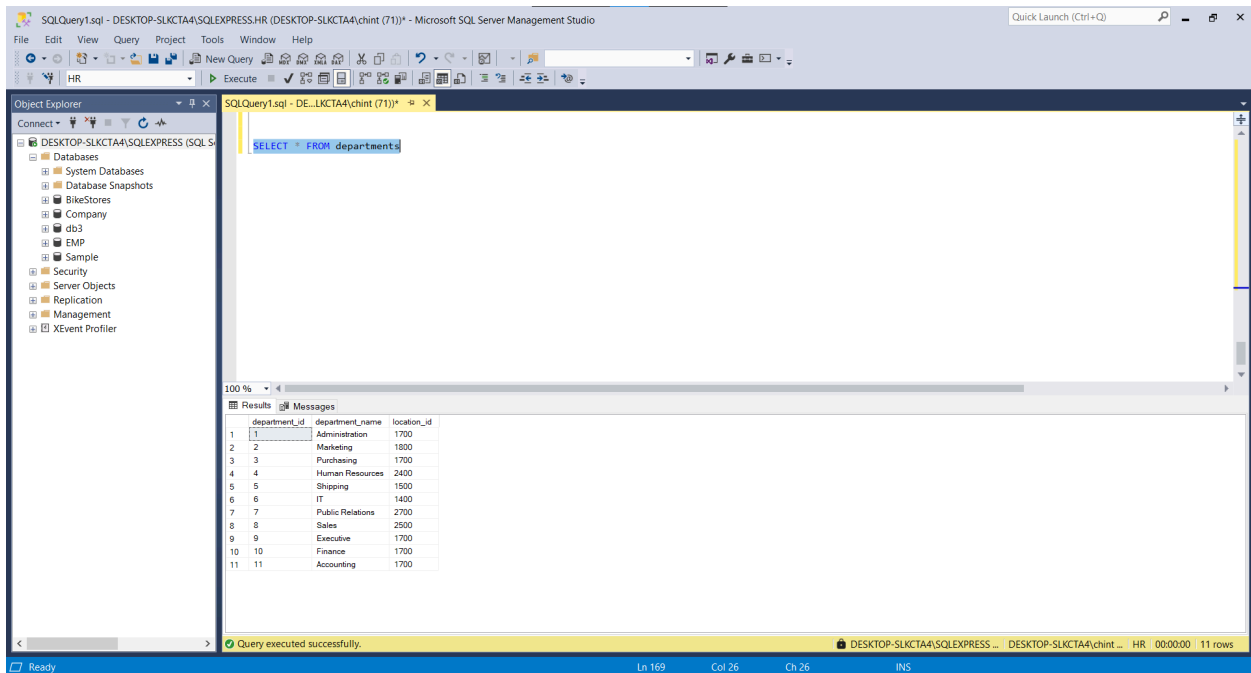
Results:

location_id	street_address	postal_code	city	state_province	country_id
1400	2014 Jabbenwocky Rd	26192	Southlake	Texas	US
1500	2011 Interiors Blvd	99236	South San Francisco	California	US
1700	2004 Charade Rd	98199	Seattle	Washington	US
1800	147 Spadina Ave	M5V 2L7	Toronto	Ontario	CA
2400	8204 Arthur St	NULL	London	NULL	UK
2500	Magdalen Centre, The Oxford Science Park	OX9 9ZB	Oxford	Oxford	UK
2700	Schwanthalerstr. 7031	80925	Munich	Bavaria	DE

Query executed successfully.

Query 4: Display all records of table departments

- 11 rows

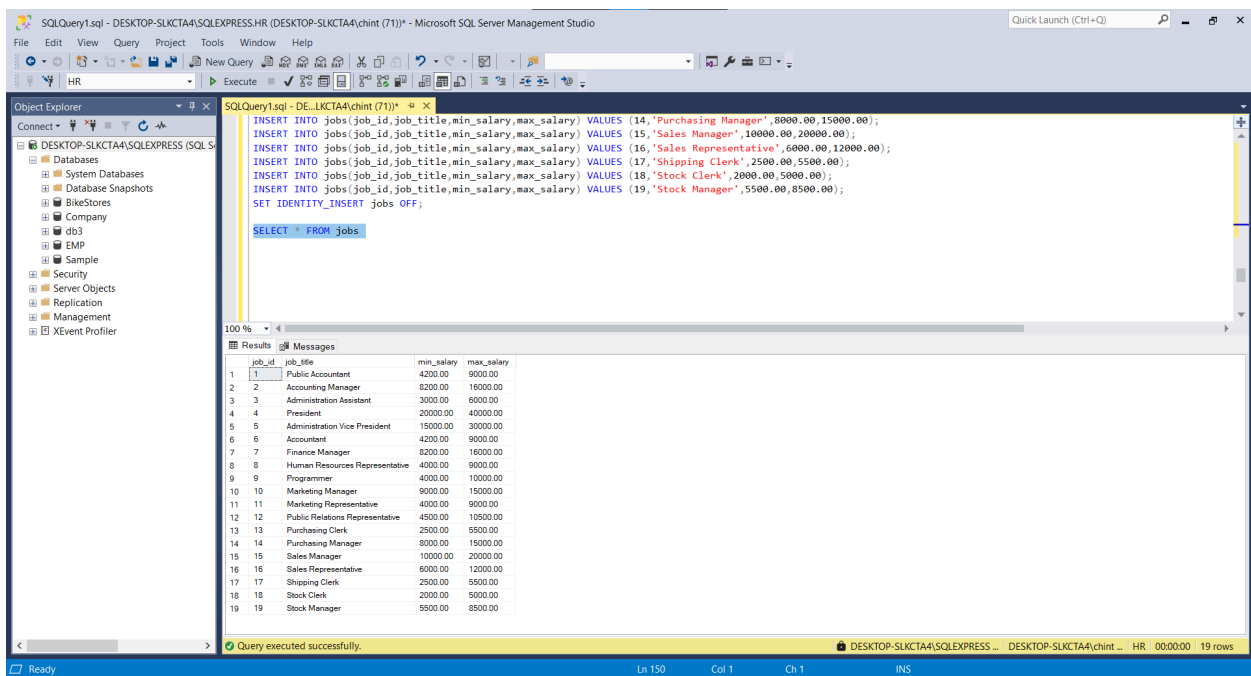


The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'DESKTOP-SLKCTA4\SQLEXPRESS'. The central query window contains the SQL statement: `SELECT * FROM departments`. The Results pane at the bottom displays the output of the query, showing 11 rows of data with columns: department_id, department_name, and location_id.

department_id	department_name	location_id
1	Administration	1700
2	Marketing	1800
3	Purchasing	1700
4	Human Resources	2400
5	Shipping	1500
6	IT	1400
7	Public Relations	2700
8	Sales	2500
9	Executive	1700
10	Finance	1700
11	Accounting	1700

Query 5: Display all records of table jobs

- 19 rows



The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'DESKTOP-SLKCTA4\SQLEXPRESS'. The central query window contains the SQL statement: `INSERT INTO jobs(job_id,job_title,min_salary,max_salary) VALUES (14,'Purchasing Manager',8000.00,15000.00);` followed by several other INSERT statements, a SET IDENTITY_INSERT statement, and a `SELECT * FROM jobs` statement. The Results pane at the bottom displays the output of the query, showing 19 rows of data with columns: job_id, job_title, min_salary, and max_salary.

job_id	job_title	min_salary	max_salary
1	Public Accountant	4200.00	9000.00
2	Accounting Manager	8200.00	16000.00
3	Administration Assistant	3000.00	6000.00
4	President	20000.00	40000.00
5	Administration Vice President	15000.00	30000.00
6	Accountant	4200.00	9000.00
7	Finance Manager	8200.00	16000.00
8	Human Resources Representative	4000.00	9000.00
9	Programmer	4000.00	10000.00
10	Marketing Manager	9000.00	15000.00
11	Marketing Representative	4000.00	9000.00
12	Public Relations Representative	4500.00	10500.00
13	Purchasing Clerk	2500.00	5500.00
14	Purchasing Manager	8000.00	15000.00
15	Sales Manager	10000.00	20000.00
16	Sales Representative	6000.00	12000.00
17	Shipping Clerk	2500.00	5500.00
18	Stock Clerk	2000.00	5000.00
19	Stock Manager	5500.00	8500.00

Query 6: Display all records of table employees

- 40 rows

SQLQuery1.sql - DESKTOP-SLKCTA4\SQLXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLXPRESS (SQL Server)

Query: `SELECT * FROM employees`

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id
1	Steven	King	steven.king@equatorial.org	515.123.4567	1987-06-17	4	24000.00	NULL	9
2	Neena	Kochhar	neena.kochhar@equatorial.org	515.123.4568	1989-09-21	5	17000.00	100	9
3	Lex	De Haan	lex.de.haan@equatorial.org	515.123.4569	1993-01-13	5	17000.00	100	9
4	Alexander	Hunold	alexander.hunold@equatorial.org	590.423.4567	1990-01-03	9	9000.00	102	6
5	Bruce	Ernst	bruce.ernst@equatorial.org	590.423.4568	1991-05-21	9	6000.00	103	6
6	David	Austin	david.austin@equatorial.org	590.423.4569	1997-06-25	9	4800.00	103	6
7	Valli	Pataballa	valli.pataballa@equatorial.org	590.423.4560	1998-02-05	9	4800.00	103	6
8	Diana	Lorentz	diana.lorentz@equatorial.org	590.423.4567	1999-02-07	9	4200.00	103	6
9	Nancy	Greenberg	nancy.greenberg@equatorial.org	515.124.4569	1994-08-17	7	12000.00	101	10
10	Daniel	Faviet	daniel.faviet@equatorial.org	515.124.4169	1994-08-16	6	9000.00	108	10
11	John	Chen	john.chen@equatorial.org	515.124.4269	1997-09-28	6	8200.00	108	10
12	Ismael	Sciarra	ismael.sciarra@equatorial.org	515.124.4369	1997-09-30	6	7700.00	108	10
13	Jose Ma.	Uman	josemanuel.uman@equatorial.org	515.124.4469	1998-03-07	6	7300.00	108	10
14	Luis	Popp	luis.popp@equatorial.org	515.124.4567	1999-12-07	6	6900.00	108	10
15	Den	Raphaely	den.raphaely@equatorial.org	515.127.4561	1994-12-07	14	11000.00	100	3
16	Alexander	Khoo	alexander.khoo@equatorial.org	515.127.4562	1995-05-18	13	3100.00	114	3
17	Shelli	Baida	shelli.baida@equatorial.org	515.127.4563	1997-12-24	13	2900.00	114	3
18	Sigal	Tobias	sigal.tobias@equatorial.org	515.127.4564	1997-07-24	13	2800.00	114	3
19	Gir	Himuro	gir.himuro@equatorial.org	515.127.4565	1998-11-15	13	2600.00	114	3
20	Karen	Colmena	karen.colmenares@equatorial.org	515.127.4566	1999-08-10	13	2500.00	114	3
21	Matthew	Weiss	matthew.weiss@equatorial.org	650.123.1234	1996-07-18	19	8000.00	100	5
22	Adam	Fripp	adam.fripp@equatorial.org	650.123.2234	1997-04-10	19	8200.00	100	5
23	Payam	Kaufing	payam.kaufing@equatorial.org	650.123.3234	1995-05-01	19	7900.00	100	5
24	Shanta	Vollman	shanta.vollman@equatorial.org	650.123.4234	1997-10-10	19	6500.00	100	5
25	Irene	Mikkilineni	irene.mikkilineni@equatorial.org	650.124.1224	1998-09-28	18	2700.00	120	5
26	John	Russell	john.russell@equatorial.org	NULL	1996-10-01	15	14000.00	100	8
27	Karen	Partners	karen.partners@equatorial.org	NULL	1997-01-05	15	13500.00	100	8
28	Jonathan	Taylor	jonathan.taylor@equatorial.org	NULL	1998-03-24	16	8600.00	100	8
29	Jack	Livingston	jack.livingston@equatorial.org	NULL	1998-04-23	16	8400.00	100	8
30	Kimberly	Grant	kimberly.grant@equatorial.org	NULL	1999-05-24	16	7000.00	100	8
31	Charles	Johnson	charles.johnson@equatorial.org	NULL	2000-01-04	16	6200.00	100	8
32	Sarah	Bel	sarah.bel@equatorial.org	650.501.1876	1996-02-04	17	4000.00	123	5

Query executed successfully.

DESKTOP-SLKCTA4\SQLXPRESS:HR 00:00:00 40 rows

Query 7: Display all records of table dependents

- 30 rows

SQLQuery1.sql - DESKTOP-SLKCTA4\SQLXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLXPRESS (SQL Server)

Query: `SELECT * FROM dependents`

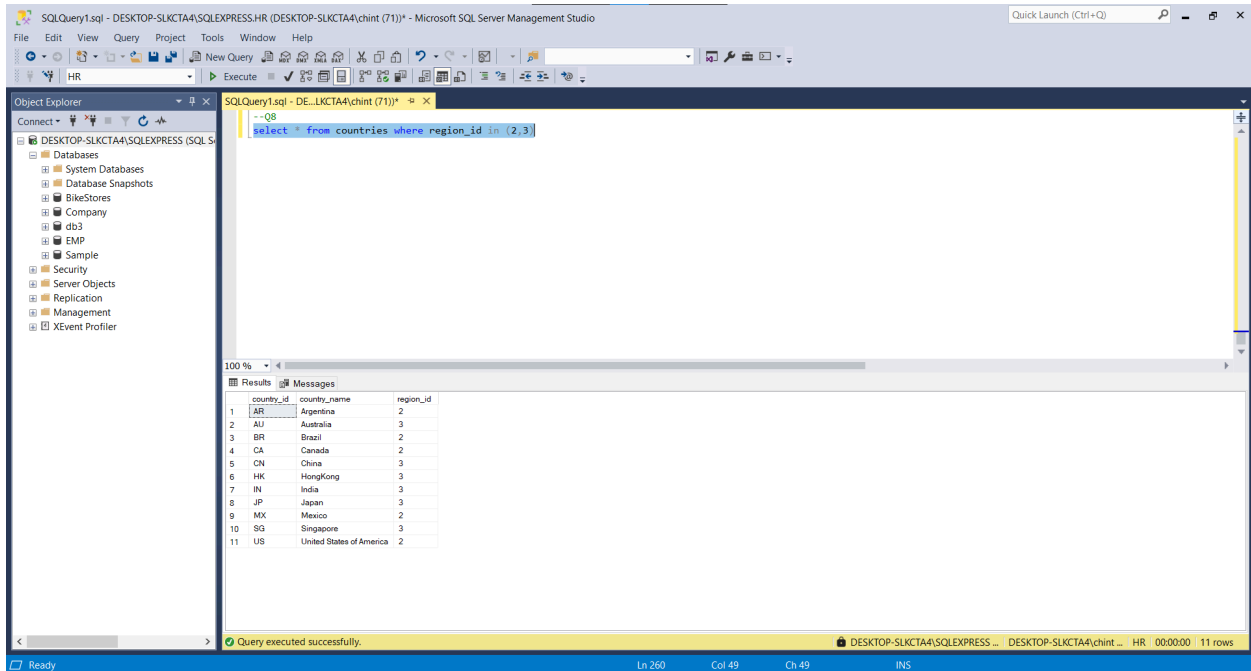
dependent_id	first_name	last_name	relationship	employee_id
1	Penelope	Gietz	Child	206
2	Nick	Higgins	Child	205
3	Ed	Whalen	Child	200
4	Jennifer	King	Child	100
5	Johnny	Kochhar	Child	101
6	Bette	De Haan	Child	102
7	Graeme	Faviet	Child	109
8	Matthew	Chen	Child	110
9	Joe	Sciarra	Child	111
10	Christian	Uman	Child	112
11	Zero	Popp	Child	113
12	Karl	Greenberg	Child	108
13	Uma	Mavris	Child	203
14	Vivien	Hunold	Child	103
15	Cuba	Ernst	Child	104
16	Fred	Austin	Child	105
17	Helen	Pataballa	Child	106
18	Dan	Lorentz	Child	107
19	Bob	Hartstein	Child	201
20	Lucille	Fay	Child	202
21	Kristen	Baer	Child	204
22	Elvis	Khoo	Child	115
23	Sandra	Baida	Child	116
24	Cameron	Tobias	Child	117
25	Kevin	Himuro	Child	118
26	Rip	Colmena	Child	119
27	Julia	Raphaely	Child	114
28	Woody	Russell	Child	145
29	Alec	Partners	Child	146
30	Sandra	Taylor	Child	176

Query executed successfully.

DESKTOP-SLKCTA4\SQLXPRESS:HR 00:00:00 30 rows

Query 8: Display all records of table countries where region_id is 2 or 3

- 11 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q8
select * from countries where region_id in (2,3)

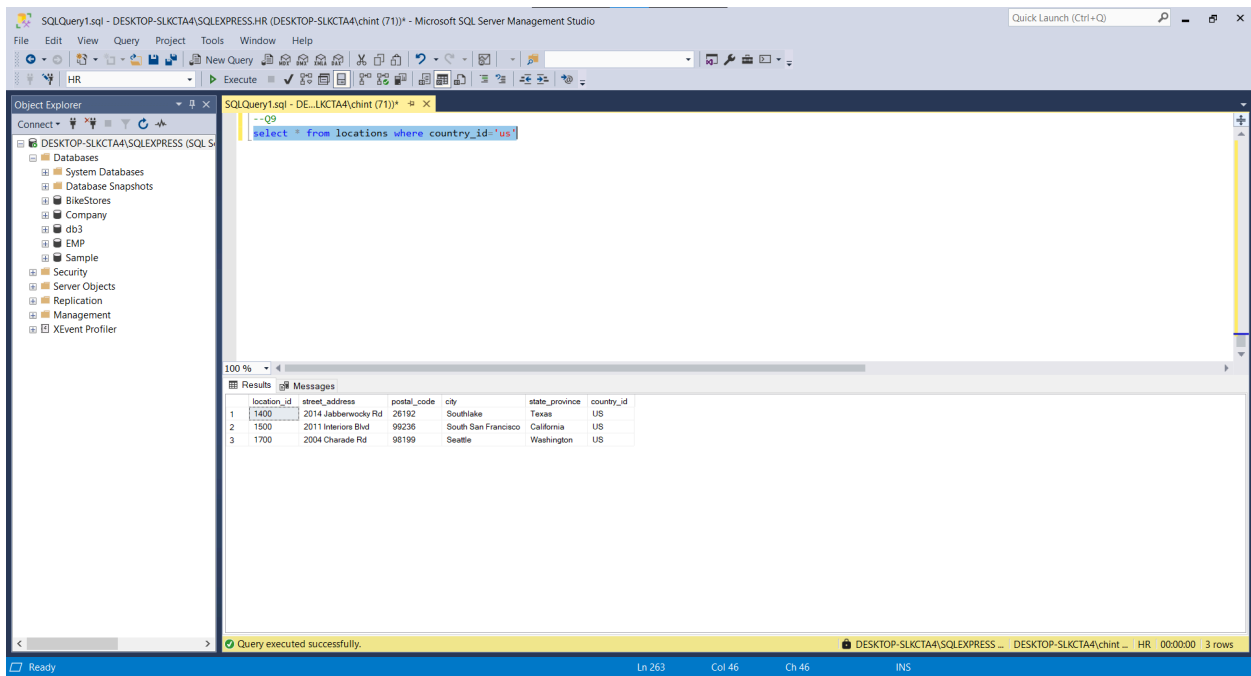
Results:

country_id	country_name	region_id
AR	Argentina	2
AU	Australia	3
BR	Brazil	2
CA	Canada	2
CN	China	3
HK	HongKong	3
IN	India	3
JP	Japan	3
MX	Mexico	2
SG	Singapore	3
US	United States of America	2

Query executed successfully. DESKTOP-SLKCTA4\SQLEXPRESS ... DESKTOP-SLKCTA4\chint ... HR 00:00:00 11 rows

Query 9: Display all records of table locations for country_id is US

- 3 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q9
select * from locations where country_id = 'us'

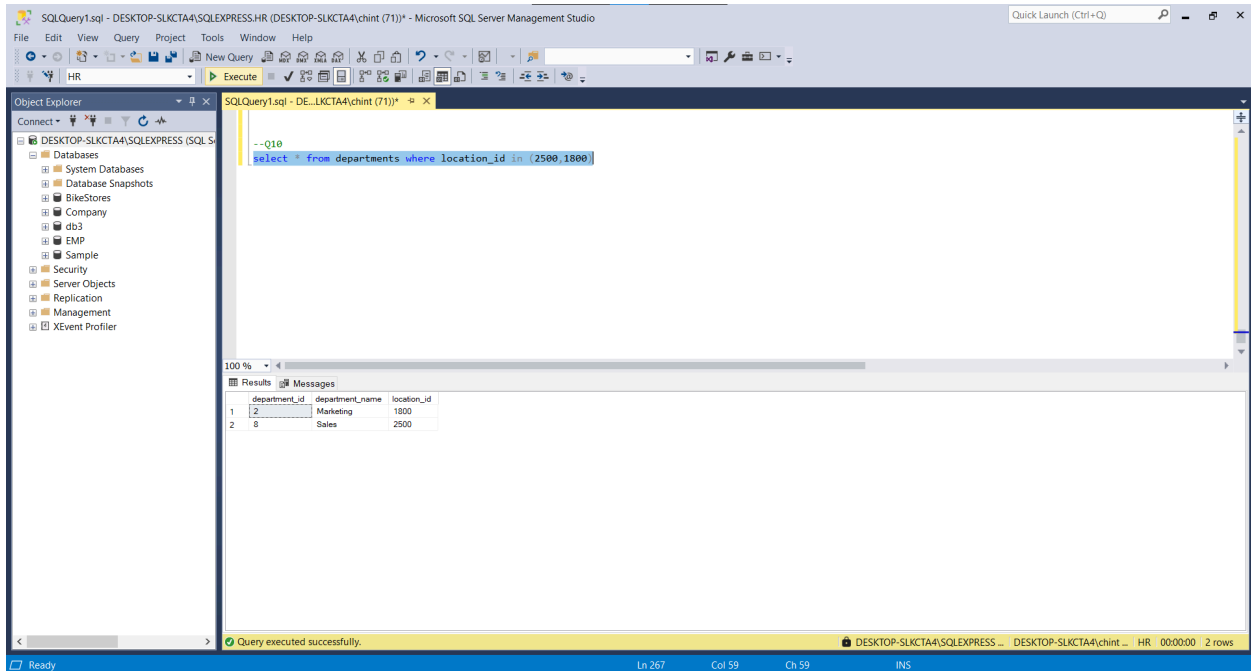
Results:

location_id	street_address	postal_code	city	state_province	country_id
1400	2014 Jabberwocky Rd	20192	Southlake	Texas	US
1500	2011 Interiors Blvd	99236	South San Francisco	California	US
1700	2004 Charade Rd	98199	Seattle	Washington	US

Query executed successfully. DESKTOP-SLKCTA4\SQLEXPRESS ... DESKTOP-SLKCTA4\chint ... HR 00:00:00 3 rows

Query 10: Display all records of table department where location_id is 2500 or 1800

- **2 rows**



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q10
select * from departments where location_id in (2500,1800)

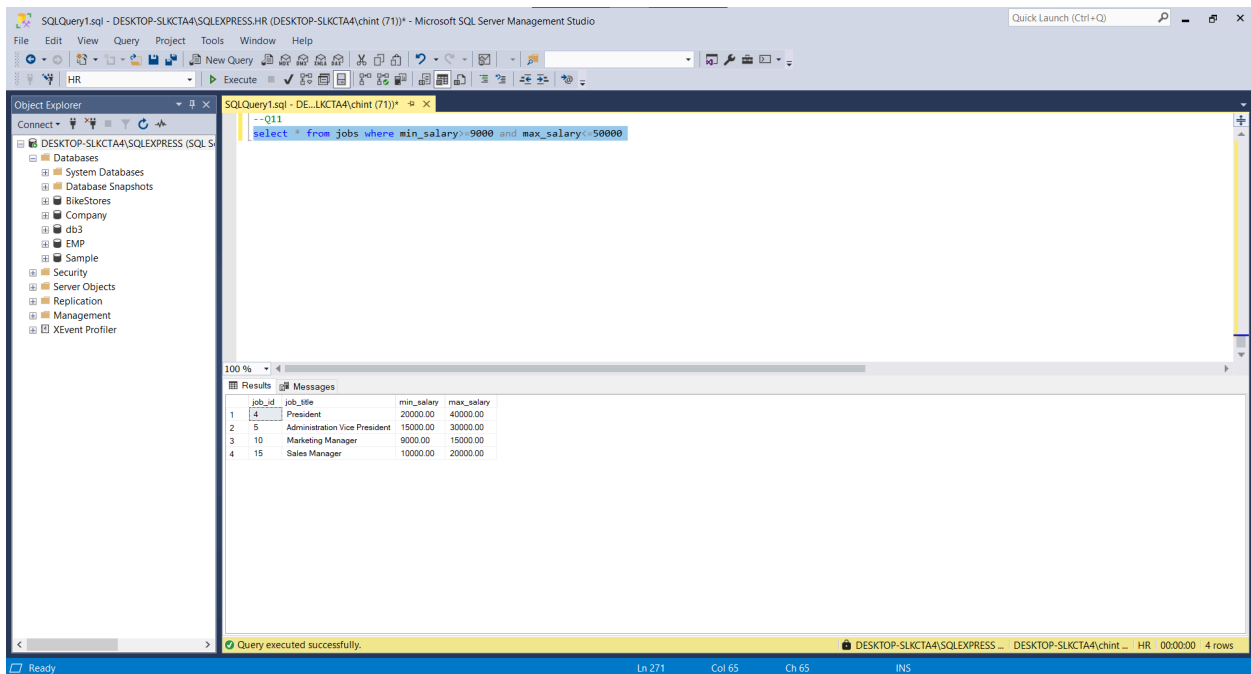
Results: Messages

	department_id	department_name	location_id
1	2	Marketing	1800
2	8	Sales	2500

Query executed successfully. DESKTOP-SLKCTA4\SQLEXPRESS ... DESKTOP-SLKCTA4\chint ... HR 00:00:00 2 rows

Query 11: Display all records of table jobs where Min salary is >=9000 and max salary is <=50000

- **4 rows**



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q11
select * from jobs where min_salary >= 9000 and max_salary <= 50000

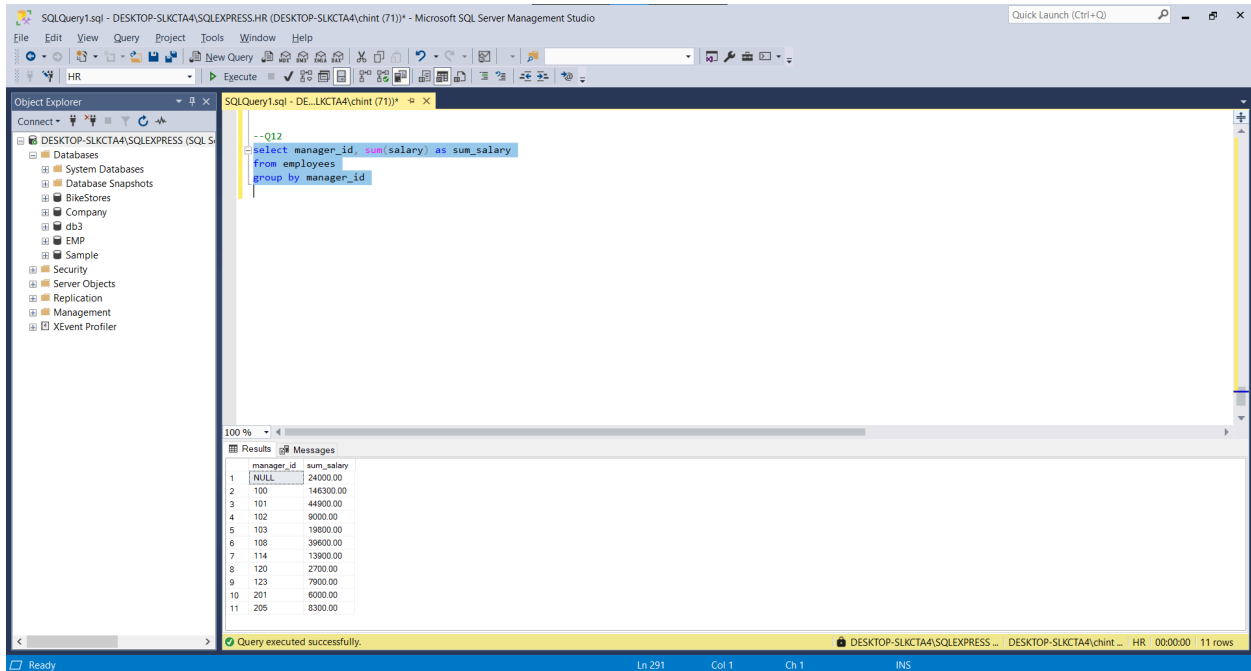
Results: Messages

	job_id	job_title	min_salary	max_salary
1	4	President	20000.00	40000.00
2	5	Administration Vice President	15000.00	30000.00
3	10	Marketing Manager	9000.00	15000.00
4	15	Sales Manager	10000.00	20000.00

Query executed successfully. DESKTOP-SLKCTA4\SQLEXPRESS ... DESKTOP-SLKCTA4\chint ... HR 00:00:00 4 rows

Query 12: Calculate the sum salary from table Employee grouping on Manager_id

- 11 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q12
select manager_id, sum(salary) as sum_salary
from employees
group by manager_id

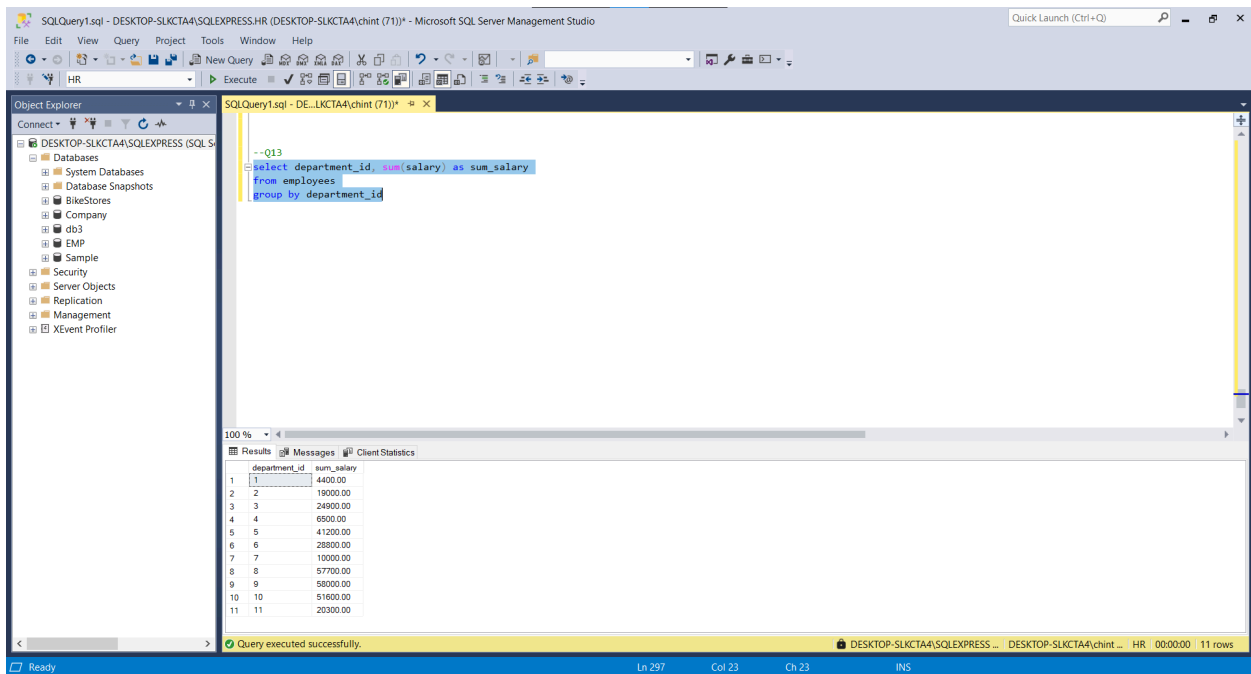
Results: 11 rows

manager_id	sum_salary
1	24000.00
2	146300.00
3	44000.00
4	9000.00
5	19800.00
6	39600.00
7	13900.00
8	2700.00
9	7900.00
10	6000.00
11	8300.00

Query executed successfully.

Query 13: Calculate the sum salary from table Employee grouping on Department_id

- 11 rows



SQLQuery1.sql - DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-SLKCTA4\SQLEXPRESS (SQL S)

Query: --Q13
select department_id, sum(salary) as sum_salary
from employees
group by department_id

Results: 11 rows

department_id	sum_salary
1	4400.00
2	19000.00
3	24900.00
4	6500.00
5	41200.00
6	28800.00
7	10000.00
8	57700.00
9	58000.00
10	51600.00
11	20300.00

Query executed successfully.

Query 14: Display records from table Employee where Hire_date is 1991

- 1 row

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DESKTOP-SLKCTA4\SQLEXPRESS'. The central pane shows a SQL query: `--Q14
select * from employees where year(hire_date)=1991`. The Results pane at the bottom displays a single row of data for employee 104, Bruce Ernst, hired on 1991-05-21.

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id
104	Bruce	Ernst	bruce.ernst@sqltutorial.org	590.423.4568	1991-05-21	9	6000.00	103	6

Query 15: Display records from table Employee where Hire_date is >=1995 and <=2000

- 27 rows

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure for 'DESKTOP-SLKCTA4\SQLEXPRESS'. The central pane shows a SQL query: `--Q15
select * from employees where year(hire_date)>=1995 and year(hire_date)<=2000`. The Results pane at the bottom displays 27 rows of data for employees hired between 1995 and 2000.

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id
105	David	Austin	david.austin@sqltutorial.org	590.423.4569	1997-06-25	9	4800.00	103	6
106	Valli	Pataballa	valli.pataballa@sqltutorial.org	590.423.4560	1998-02-05	9	4800.00	103	6
107	Diana	Lorentz	diana.lorentz@sqltutorial.org	590.423.5567	1999-02-07	9	4200.00	103	6
110	John	Chen	john.chen@sqltutorial.org	515.124.4269	1997-09-28	6	6200.00	108	10
111	Ismail	Sciarra	ismael.sciarra@sqltutorial.org	515.124.4369	1997-09-30	6	7700.00	108	10
112	Jose Manuel	Urman	josemanuel.urman@sqltutorial.org	515.124.4469	1998-03-07	6	7800.00	108	10
113	Luis	Popp	luis.popp@sqltutorial.org	515.124.4567	1999-12-07	6	6900.00	108	10
115	Alexander	Khoo	alexander.khoo@sqltutorial.org	515.127.4562	1995-05-18	13	3100.00	114	3
116	Shelli	Baer	shelli.baer@sqltutorial.org	515.127.4563	1997-12-24	13	2900.00	114	3
117	Sigal	Tobias	sigal.tobias@sqltutorial.org	515.127.4564	1997-07-24	13	2800.00	114	3
118	Guy	Himuro	guy.himuro@sqltutorial.org	515.127.4565	1998-11-15	13	2600.00	114	3
119	Karen	Colmenares	karen.colmenares@sqltutorial.org	515.127.4566	1999-08-10	13	2500.00	114	3
120	Matthew	Weiss	matthew.weiss@sqltutorial.org	650.123.1234	1996-07-18	19	8000.00	100	5
121	Adam	Frigg	adam.frigg@sqltutorial.org	650.123.2234	1997-04-10	19	8200.00	100	5
122	Payam	Kaufing	payam.kaufing@sqltutorial.org	650.123.3234	1995-05-01	19	7900.00	100	5
123	Shanta	Vollman	shanta.vollman@sqltutorial.org	650.123.4234	1997-10-10	19	6500.00	100	5
126	Irene	Mikkilineni	irene.mikkilineni@sqltutorial.org	650.124.1224	1998-09-28	18	2700.00	120	5
145	John	Russell	john.russell@sqltutorial.org	NULL	1996-10-01	15	14000.00	100	8
146	Karen	Partners	karen.partners@sqltutorial.org	NULL	1997-01-05	15	13500.00	100	8
176	Jonathan	Taylor	jonathan.taylor@sqltutorial.org	NULL	1998-03-24	16	8600.00	100	8
177	Jack	Livingston	jack.livingston@sqltutorial.org	NULL	1998-04-23	16	8400.00	100	8
178	Kimberely	Grant	kimberely.grant@sqltutorial.org	NULL	1999-05-24	16	7000.00	100	8
179	Charles	Johnson	charles.johnson@sqltutorial.org	NULL	2000-01-04	16	6200.00	100	8
182	Sarah	Bel	sarah.bel@sqltutorial.org	650.501.1876	1996-02-04	17	4000.00	123	5
183	Britney	Everett	britney.everett@sqltutorial.org	650.501.2876	1997-03-03	17	3900.00	123	5
201	Michael	Hartstein	michael.hartstein@sqltutorial.org	515.123.5555	1996-02-17	10	13000.00	100	2
202	Pat	Fay	pat.fay@sqltutorial.org	603.123.6666	1997-08-17	11	6000.00	201	2

Query 16: Display records from table Employee where phone is NULL

- 6 rows

The screenshot displays the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'DESKTOP-SLKCTA4\SQLEXPRESS:HR (DESKTOP-SLKCTA4\chint (71))'. The 'Object Explorer' on the left shows the database structure, including 'Databases', 'System Databases', 'Database Snapshots', 'BikeStores', 'Company', 'db3', 'EMP', 'Sample', 'Security', 'Server Objects', 'Replication', 'Management', and 'XEvent Profiler'. The 'Query Editor' in the center contains the following SQL query:

```
--Q16
select * from employees where phone_number is null
```

The 'Results' pane at the bottom shows the output of the query, which consists of 6 rows. The status bar at the bottom indicates 'Query executed successfully.' and '6 rows'.

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id
145	John	Russell	john.russell@sqltutorial.org	NULL	1996-10-01	15	14000.00	100	8
146	Karen	Partners	karen.partners@sqltutorial.org	NULL	1997-01-05	15	13500.00	100	8
176	Jonathon	Taylor	jonathon.taylor@sqltutorial.org	NULL	1998-03-24	16	8600.00	100	8
177	Jack	Livingston	jack.livingston@sqltutorial.org	NULL	1998-04-23	16	8400.00	100	8
178	Kimberely	Grant	kimberely.grant@sqltutorial.org	NULL	1999-05-24	16	7000.00	100	8
179	Charles	Johnson	charles.johnson@sqltutorial.org	NULL	2000-01-04	16	6200.00	100	8