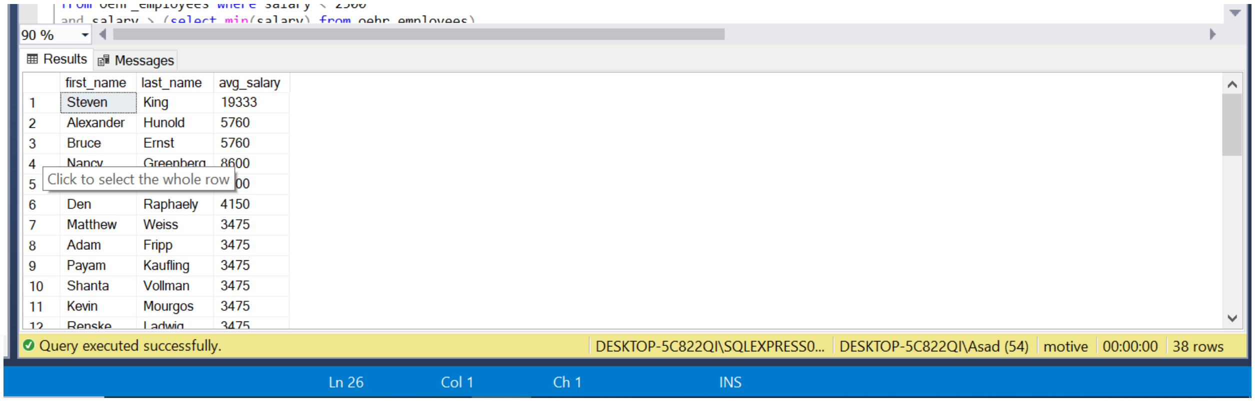
Assignment 5:

```
-- Question 1: Find the names of employees who earn more than the average salary of their
department.

select first_name, last_name, b.avg_salary from oehr_employees a inner join (select
department_id, avg(salary) avg_salary
from oehr_employees where department_id is not null group by department_id) b
on a.department_id = b.department_id and a.salary > b.avg_salary;
```



```
from oehr_employees where salary < 2500
and salary > (select min(salary) from oehr_employees)
```

90 %

Results | Messages

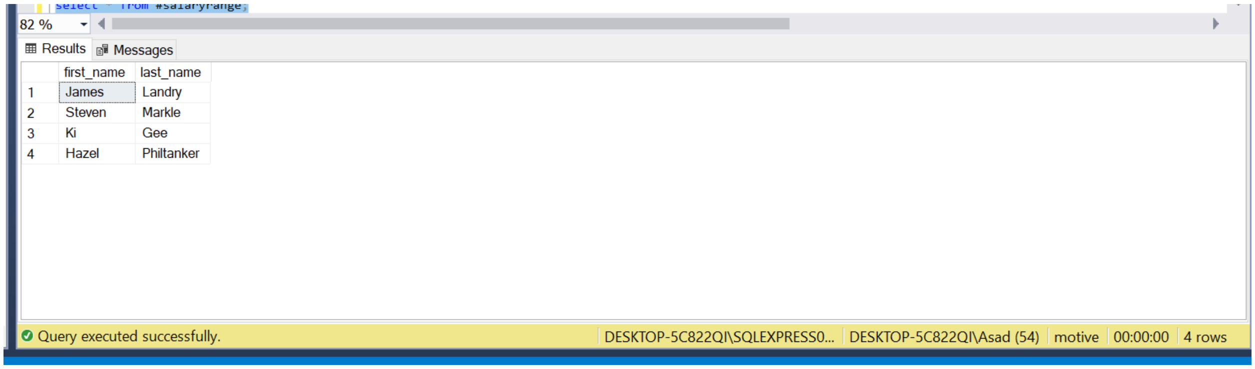
	first_name	last_name	avg_salary
1	Steven	King	19333
2	Alexander	Hunold	5760
3	Bruce	Ernst	5760
4	Nancy	Greenberg	8600
5	[illegible]	[illegible]	00
6	Den	Raphaely	4150
7	Matthew	Weiss	3475
8	Adam	Fripp	3475
9	Payam	Kaufling	3475
10	Shanta	Vollman	3475
11	Kevin	Mourgos	3475
12	Renske	Ladwig	3475

Click to select the whole row

✓ Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 38 rows

Ln 26 Col 1 Ch 1 INS

```
-- Question 2: Write a SQL query to find details of those employees where the salary
falls within the range of the
-- smallest salary and 2500. Sort the results by highest salary to lowest salary. Put the
results in a table and show results.

select first_name, last_name
into #salaryrange
from oehr_employees where salary < 2500
and salary > (select min(salary) from oehr_employees)
order by salary desc;

select * from #salaryrange;
```



```
select * from #salaryrange;
```

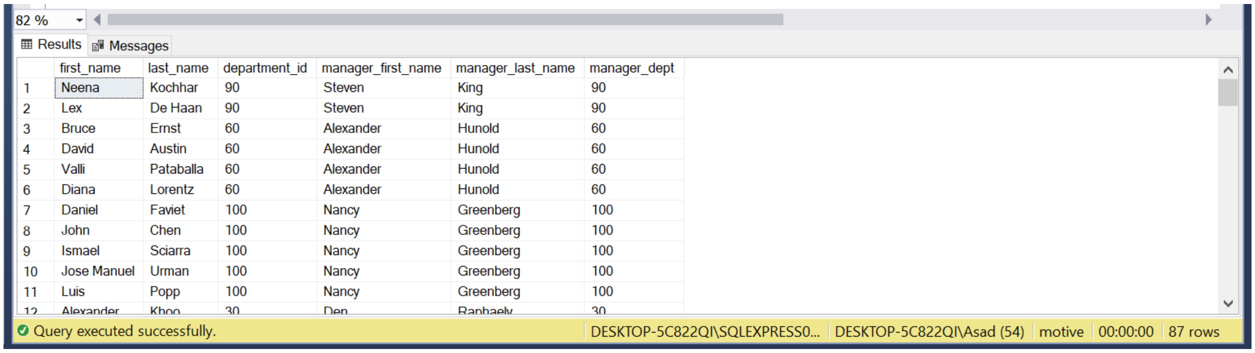
82 %

Results | Messages

	first_name	last_name
1	James	Landry
2	Steven	Markle
3	Ki	Gee
4	Hazel	Philtanker

✓ Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 4 rows

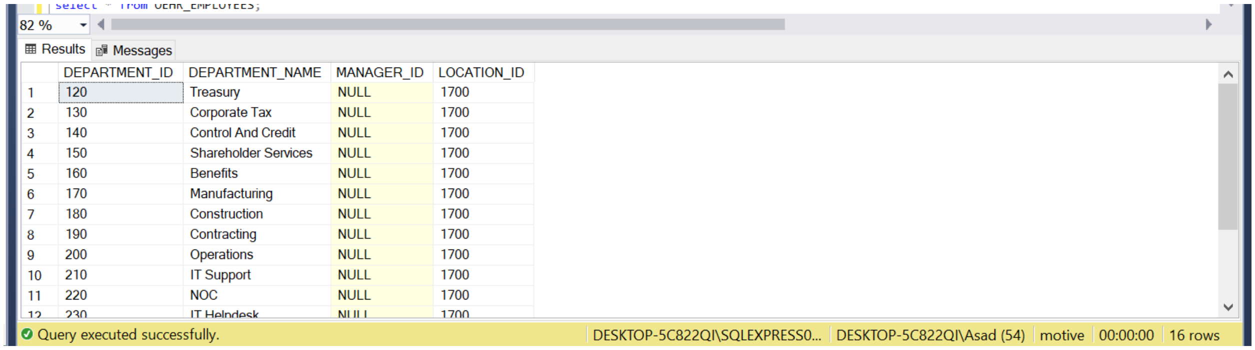
```sql
-- Question 3: List all employees who work in the same department as a manager.
select
a.first_name, a.last_name, a.department_id,
b.first_name manager_first_name, b.last_name manager_last_name, b.department_id
manager_dept
from oehr_employees a inner join oehr_employees b on a.manager_id = b.employee_id
and a.department_id = b.department_id;
```



	first_name	last_name	department_id	manager_first_name	manager_last_name	manager_dept
1	Neena	Kochhar	90	Steven	King	90
2	Lex	De Haan	90	Steven	King	90
3	Bruce	Ernst	60	Alexander	Hunold	60
4	David	Austin	60	Alexander	Hunold	60
5	Valli	Pataballa	60	Alexander	Hunold	60
6	Diana	Lorentz	60	Alexander	Hunold	60
7	Daniel	Faviet	100	Nancy	Greenberg	100
8	John	Chen	100	Nancy	Greenberg	100
9	Ismael	Sciarra	100	Nancy	Greenberg	100
10	Jose Manuel	Urman	100	Nancy	Greenberg	100
11	Luis	Popp	100	Nancy	Greenberg	100
12	Alexander	Khoo	30	Den	Raphaely	30

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 87 rows

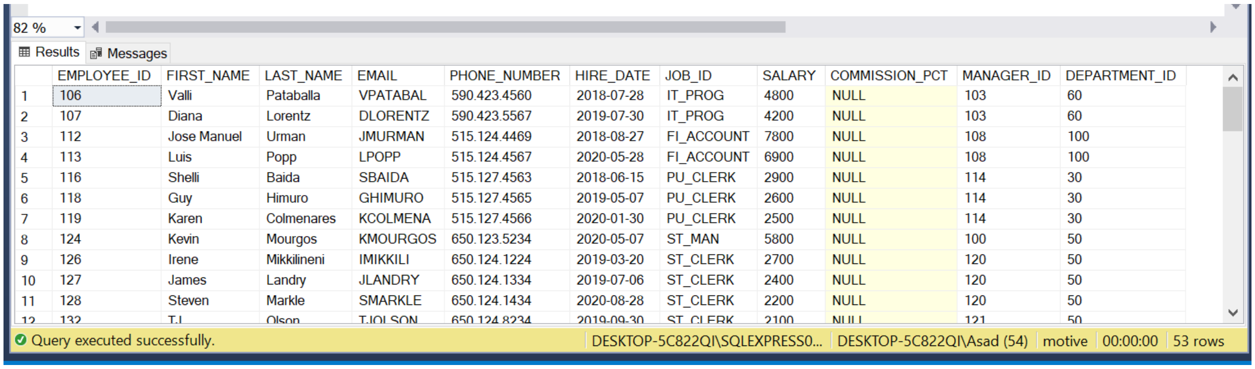
```sql
-- Question 4: Using Subqueries, Find the departments with no employees.
select * from oehr_departments where department_id not in
(select distinct department_id from oehr_employees where department_id is not null);
```



	DEPARTMENT_ID	DEPARTMENT_NAME	MANAGER_ID	LOCATION_ID
1	120	Treasury	NULL	1700
2	130	Corporate Tax	NULL	1700
3	140	Control And Credit	NULL	1700
4	150	Shareholder Services	NULL	1700
5	160	Benefits	NULL	1700
6	170	Manufacturing	NULL	1700
7	180	Construction	NULL	1700
8	190	Contracting	NULL	1700
9	200	Operations	NULL	1700
10	210	IT Support	NULL	1700
11	220	NOC	NULL	1700
12	230	IT Helpdesk	NULL	1700

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 16 rows

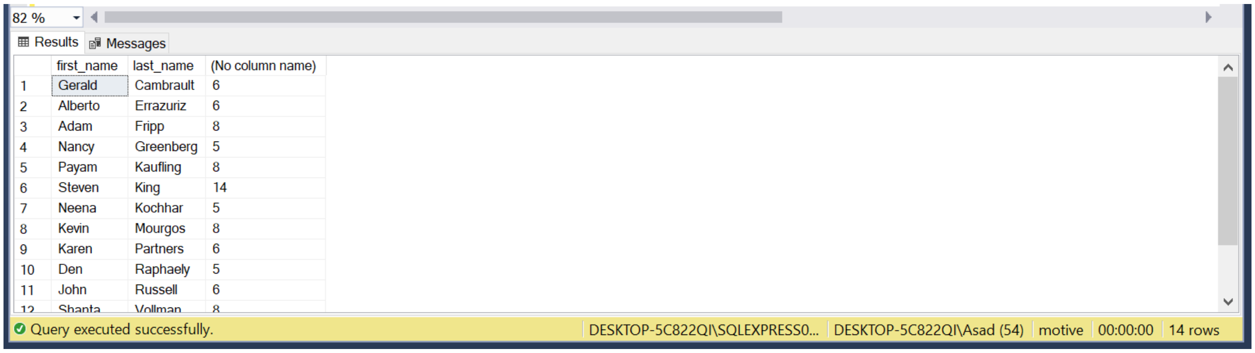
```sql
-- Question 5: Find employees who were hired after the company's mean hiring date.
select * from oehr_employees where hire_date > '2018-06-10';
-- or any date that is: 2018-06-06, 2018-06-15, 2018-06-11
```



	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	106	Valli	Pataballa	VPATABAL	590.423.4560	2018-07-28	IT_PROG	4800	NULL	103	60
2	107	Diana	Lorentz	DLORENTZ	590.423.5567	2019-07-30	IT_PROG	4200	NULL	103	60
3	112	Jose Manuel	Urman	JMURMAN	515.124.4469	2018-08-27	FI_ACCOUNT	7800	NULL	108	100
4	113	Luis	Popp	LPOPP	515.124.4567	2020-05-28	FI_ACCOUNT	6900	NULL	108	100
5	116	Shelli	Baida	SBAIDA	515.127.4563	2018-06-15	PU_CLERK	2900	NULL	114	30
6	118	Guy	Himuro	GHIMURO	515.127.4565	2019-05-07	PU_CLERK	2600	NULL	114	30
7	119	Karen	Colmenares	KCOLMENA	515.127.4566	2020-01-30	PU_CLERK	2500	NULL	114	30
8	124	Kevin	Mourgos	KMOURGOS	650.123.5234	2020-05-07	ST_MAN	5800	NULL	100	50
9	126	Irene	Mikkilineni	IMIKKILI	650.124.1224	2019-03-20	ST_CLERK	2700	NULL	120	50
10	127	James	Landry	JLANDRY	650.124.1334	2019-07-06	ST_CLERK	2400	NULL	120	50
11	128	Steven	Markle	SMARKLE	650.124.1434	2020-08-28	ST_CLERK	2200	NULL	120	50
12	132	TJ	Olson	TJOLSON	650.124.8234	2019-09-30	ST_CLERK	2100	NULL	121	50

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 53 rows

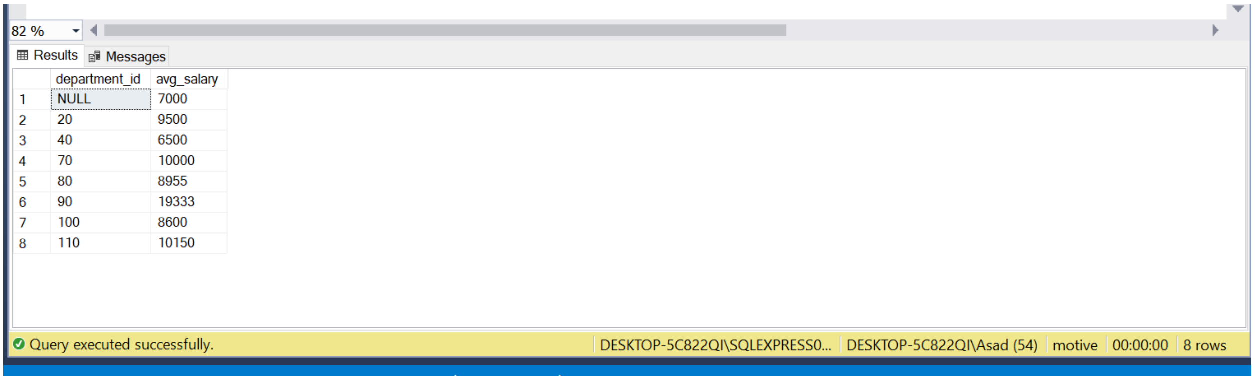
```
-- Question 6: List the names of all managers who have at least 5 employees in their
department.

select b.first_name, b.last_name, count(a.employee_id) from OEHR_EMPLOYEES a left join
OEHR_EMPLOYEES b on a.manager_id = b.employee_id
where b.first_name is not NULL and b.last_name is not null group by b.first_name,
b.last_name
having count(a.employee_id) >= 5;

Note: can accept the results with NULL as well.
```



	first_name	last_name	(No column name)
1	Gerald	Cambrault	6
2	Alberto	Errazuriz	6
3	Adam	Fripp	8
4	Nancy	Greenberg	5
5	Payam	Kaufling	8
6	Steven	King	14
7	Neena	Kochhar	5
8	Kevin	Mourgos	8
9	Karen	Partners	6
10	Den	Raphaely	5
11	John	Russell	6
12	Shanta	Vollman	8

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 14 rows

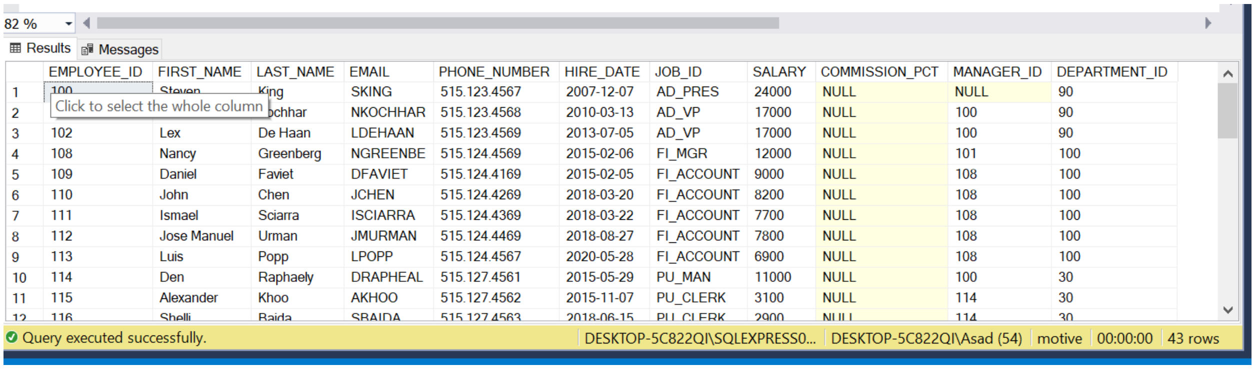
```
-- Question 7: Find the departments where the average salary is greater than the
company's overall average salary.
select department_id, avg_salary from
(select department_id, avg(salary) avg_salary from OEHR_EMPLOYEES group by department_id)
a
where avg_salary > (select avg(salary) from OEHR_EMPLOYEES);


Note: can accept the results with NULL as well. Also, it can be names as well without the
avg_salary column. But the number of rows should be same.
```



	department_id	avg_salary
1	NULL	7000
2	20	9500
3	40	6500
4	70	10000
5	80	8955
6	90	19333
7	100	8600
8	110	10150

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 8 rows

```
-- Question 8: List the employees who have a job title that is not present in the job
history table.
select * from OEHR_EMPLOYEES where JOB_ID not in (select distinct JOB_ID from
oehr_job_history);
```



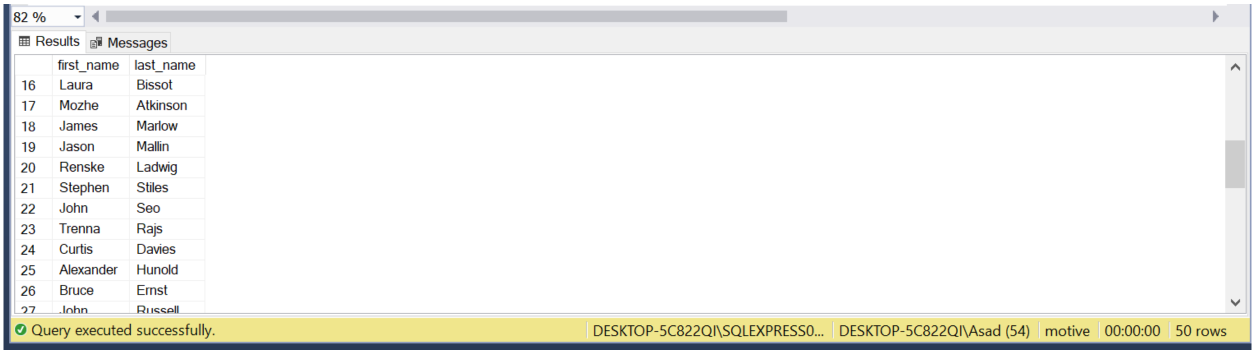
82 %

Results | Messages

	EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	100	Steven	King	SKING	515.123.4567	2007-12-07	AD_PRES	24000	NULL	NULL	90
2	Click to select the whole column		ochhar	NKOCHHAR	515.123.4568	2010-03-13	AD_VP	17000	NULL	100	90
3	102	Lex	De Haan	LDEHAAN	515.123.4569	2013-07-05	AD_VP	17000	NULL	100	90
4	108	Nancy	Greenberg	NGREENBE	515.124.4569	2015-02-06	FI_MGR	12000	NULL	101	100
5	109	Daniel	Faviet	DFAVIET	515.124.4169	2015-02-05	FI_ACCOUNT	9000	NULL	108	100
6	110	John	Chen	JCHEN	515.124.4269	2018-03-20	FI_ACCOUNT	8200	NULL	108	100
7	111	Ismael	Sciarra	ISCIARRA	515.124.4369	2018-03-22	FI_ACCOUNT	7700	NULL	108	100
8	112	Jose Manuel	Urman	JMURMAN	515.124.4469	2018-08-27	FI_ACCOUNT	7800	NULL	108	100
9	113	Luis	Popp	LPOPP	515.124.4567	2020-05-28	FI_ACCOUNT	6900	NULL	108	100
10	114	Den	Raphaely	DRAPHEAL	515.127.4561	2015-05-29	PU_MAN	11000	NULL	100	30
11	115	Alexander	Khoo	AKHOO	515.127.4562	2015-11-07	PU_CLERK	3100	NULL	114	30
12	116	Shelli	Baida	SBAIDA	515.127.4563	2018-06-15	PU_CLERK	2900	NULL	114	30

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 43 rows

```
-- Question 9: Find the names of employees who have been in the company longer than the
average tenure of employees in their department.
select first_name, last_name from OEHR_EMPLOYEES a inner join (
select department_id, AVG(DATEDIFF(day,hire_date,getdate())) as tenure from
OEHR_EMPLOYEES group by DEPARTMENT_ID) b on
a.department_id = b.department_id and DATEDIFF(day,a.hire_date,getdate()) > b.tenure;
```



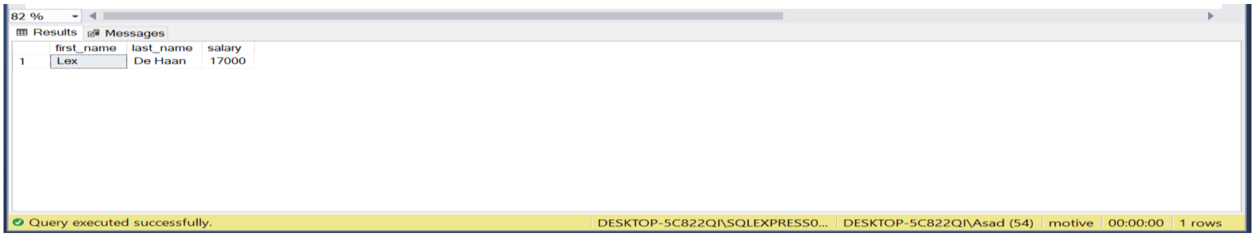
82 %

Results | Messages

	first_name	last_name
16	Laura	Bissot
17	Mozhe	Atkinson
18	James	Marlow
19	Jason	Mallin
20	Renske	Ladwig
21	Stephen	Stiles
22	John	Seo
23	Trenna	Rajs
24	Curtis	Davies
25	Alexander	Hunold
26	Bruce	Ernst
27	John	Russell

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 50 rows

```
--Question 10: Find the emplpoyee with the 3rd highest salary.
select top 1 first_name, last_name, salary from (
select TOP 3 first_name, last_name, salary from OEHR_EMPLOYEES order by salary desc) a
order by salary asc;
```



82 %

Results | Messages

	first_name	last_name	salary
1	Lex	De Haan	17000

Query executed successfully. | DESKTOP-5C822QI\SQLEXPRESS0... | DESKTOP-5C822QI\Asad (54) | motive | 00:00:00 | 1 rows