

DATA INSERTION – (From LAB 2)

use FCC;

```
CREATE TABLE Dept (  
    DEPTNO INT PRIMARY KEY,  
    DNAME VARCHAR (20) NOT NULL,  
    LOC VARCHAR (20) NOT NULL,  
  
);
```

```
CREATE TABLE Emp (  
    EMPNO INT PRIMARY KEY,  
    ENAME VARCHAR (20) NOT NULL,  
    JOB VARCHAR (25) NOT NULL,  
    MGR INT DEFAULT NULL,  
    HIREDATE VARCHAR (20) NOT NULL,  
    SAL INT NOT NULL,  
    COMM INT DEFAULT NULL,  
    DEPTNO INT NOT NULL,  
    FOREIGN KEY (DEPTNO) REFERENCES Dept (DEPTNO)  
  
);
```

```
INSERT INTO Dept ( DEPTNO, DNAME, LOC) VALUES (10, 'ACCOUNTING', 'NEW YORK');  
INSERT INTO Dept ( DEPTNO, DNAME, LOC) VALUES (20, 'RESEARCH', 'DALLAS');  
INSERT INTO Dept ( DEPTNO, DNAME, LOC) VALUES (30, 'SALES', 'CHICAGO');  
INSERT INTO Dept ( DEPTNO, DNAME, LOC) VALUES (40, 'OEPRATIONS', 'BOSTON');
```

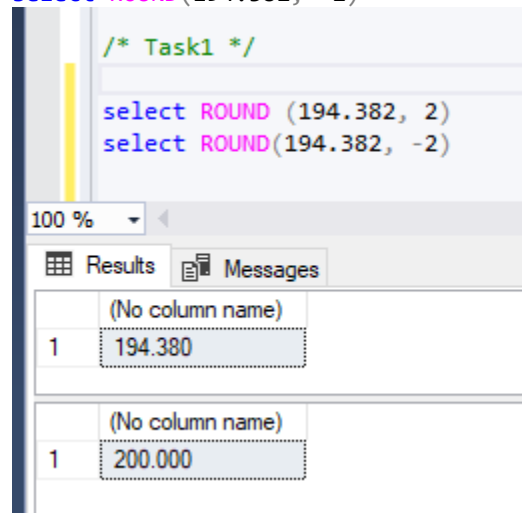
```
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7368, 'SMITH', 'CLERK', 7902, '17-DEC-80', 800, 20 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO ) VALUES (  
    7499, 'ALLEN', 'SALESMAN', 7698, '20-FEB-81', 1600, 300, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO ) VALUES (  
    7521, 'WARD', 'SALESMAN', 7698, '22-FEB-81', 1250, 500, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7566, 'JONES', 'MANAGER', 7839, '02-APR-81', 2975, 20 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO ) VALUES (  
    7654, 'MARTIN', 'SALESMAN', 7698, '28-SEP-81', 1250, 1400, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7698, 'BLAKE', 'MANAGER', 7839, '01-MAY-81', 2850, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7782, 'CLARK', 'MANAGER', 7839, '09-JUN-81', 2450, 10 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7788, 'SCOTT', 'ANALYST', 7566, '09-DEC-82', 3000, 20 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, HIREDATE, SAL, DEPTNO )  
VALUES ( 7839, 'KING', 'PRESIDENT', '17-NOV-81', 5000, 10 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7844, 'TURNER', 'SALESMAN', 7698, '08-SEP-81', 1500, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7876, 'ADAMS', 'CLERK', 7788, '12-JAN-83', 1100, 20 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7900, 'JAMES', 'CLERK', 7698, '03-DEC-81', 950, 30 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7902, 'FORD', 'ANALYST', 7566, '03-DEC-81', 3000, 20 );  
INSERT INTO Emp ( EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, DEPTNO ) VALUES (  
    7934, 'MILLER', 'CLERK', 7782, '23-JAN-82', 1300, 10 );
```

```
use FCC;
```

```
/* Task1 */
```

```
select ROUND (194.382, 2)
```

```
select ROUND(194.382, -2)
```



```
/* Task1 */
```

```
select ROUND (194.382, 2)
```

```
select ROUND(194.382, -2)
```

	(No column name)
1	194.380

	(No column name)
1	200.000

```
/* Task2 */
```

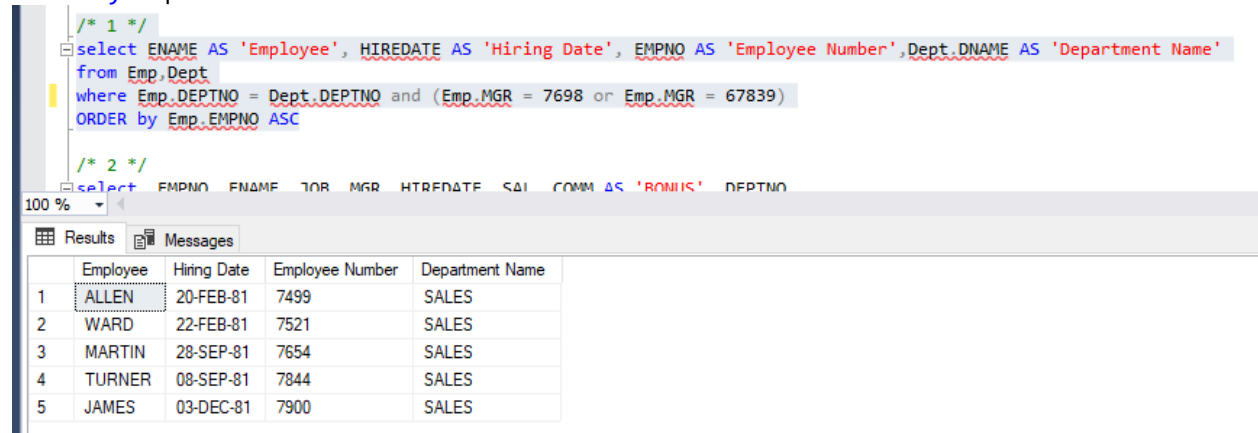
```
/* 1 */
```

```
select ENAME AS 'Employee', HIREDATE AS 'Hiring Date', EMPNO AS 'Employee  
Number', Dept.DNAME AS 'Department Name'
```

```
from Emp, Dept
```

```
where Emp.DEPTNO = Dept.DEPTNO and (Emp.MGR = 7698 or Emp.MGR = 67839)
```

```
ORDER by Emp.EMPNO ASC
```



```
/* 1 */
```

```
select ENAME AS 'Employee', HIREDATE AS 'Hiring Date', EMPNO AS 'Employee Number', Dept.DNAME AS 'Department Name'
```

```
from Emp, Dept
```

```
where Emp.DEPTNO = Dept.DEPTNO and (Emp.MGR = 7698 or Emp.MGR = 67839)
```

```
ORDER by Emp.EMPNO ASC
```

```
/* 2 */
```

```
select EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM AS 'COMMIT', DEPTNO
```

	Employee	Hiring Date	Employee Number	Department Name
1	ALLEN	20-FEB-81	7499	SALES
2	WARD	22-FEB-81	7521	SALES
3	MARTIN	28-SEP-81	7654	SALES
4	TURNER	08-SEP-81	7844	SALES
5	JAMES	03-DEC-81	7900	SALES

```
/* 2 */
```

```
select EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM AS 'BONUS', DEPTNO
```

```
from Emp
```

```
where JOB != 'CLERK' AND JOB != 'SALESMAN'
```

```
/* 2 */
```

```
select EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM AS 'BONUS', DEPTNO
```

```
from Emp
```

```
where JOB != 'CLERK' AND JOB != 'SALESMAN'
```

```
/* 3 */
```

```
select EMPNO, Emp.DEPTNO
```

```
from Emp
```

100 %

Results Messages

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	BONUS	DEPTNO
1	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20
2	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30
3	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10
4	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20
5	7839	KING	PRESIDENT	NULL	17-NOV-81	5000	NULL	10
6	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20

```
/* 3 */
select EMPNO, Emp.DEPTNO
from Emp
FULL OUTER JOIN Dept ON Emp.DEPTNO = Dept.DEPTNO
```

```
/* 3 */
select EMPNO, Emp.DEPTNO
from Emp
FULL OUTER JOIN Dept ON Emp.DEPTNO = Dept.DEPTNO
/* 4 */
```

100 %

	EMPNO	DEPTNO
1	7369	20
2	7499	30
3	7521	30
4	7566	20
5	7654	30
6	7698	30
7	7782	10
8	7788	20
9	7839	10
10	7844	30
11	7876	20
12	7900	30
13	7902	20
14	7934	10
15	NULL	NULL

```

/* 4 */
select *
from Emp,Dept

```

/* 4 */											
select *											
from Emp,Dept											
100 %											
Results Messages											
	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO	DNAME	LOC
1	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20	10	ACCOUNTING	NEW YORK
2	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	10	ACCOUNTING	NEW YORK
3	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	10	ACCOUNTING	NEW YORK
4	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	10	ACCOUNTING	NEW YORK
5	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	10	ACCOUNTING	NEW YORK
6	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30	10	ACCOUNTING	NEW YORK
7	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10	10	ACCOUNTING	NEW YORK
8	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	10	ACCOUNTING	NEW YORK
9	7839	KING	PRESIDENT	NULL	17-NOV-81	5000	NULL	10	10	ACCOUNTING	NEW YORK
10	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	NULL	30	10	ACCOUNTING	NEW YORK
11	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20	10	ACCOUNTING	NEW YORK
12	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30	10	ACCOUNTING	NEW YORK
13	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20	10	ACCOUNTING	NEW YORK
14	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10	10	ACCOUNTING	NEW YORK
15	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20	20	RESEARCH	DALLAS
16	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	20	RESEARCH	DALLAS
17	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	20	RESEARCH	DALLAS
18	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	20	RESEARCH	DALLAS
19	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	20	RESEARCH	DALLAS
20	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30	20	RESEARCH	DALLAS
21	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10	20	RESEARCH	DALLAS
22	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	20	RESEARCH	DALLAS

100 %											
Results Messages											
	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO	DNAME	LOC
22	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	20	RESEARCH	DALLAS
23	7839	KING	PRESIDENT	NULL	17-NOV-81	5000	NULL	10	20	RESEARCH	DALLAS
24	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	NULL	30	20	RESEARCH	DALLAS
25	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20	20	RESEARCH	DALLAS
26	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30	20	RESEARCH	DALLAS
27	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20	20	RESEARCH	DALLAS
28	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10	20	RESEARCH	DALLAS
29	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20	30	SALES	CHICAGO
30	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	30	SALES	CHICAGO
31	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	30	SALES	CHICAGO
32	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	30	SALES	CHICAGO
33	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	30	SALES	CHICAGO
34	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30	30	SALES	CHICAGO
35	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10	30	SALES	CHICAGO
36	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	30	SALES	CHICAGO
37	7839	KING	PRESIDENT	NULL	17-NOV-81	5000	NULL	10	30	SALES	CHICAGO
38	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	NULL	30	30	SALES	CHICAGO
39	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20	30	SALES	CHICAGO
40	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30	30	SALES	CHICAGO
41	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20	30	SALES	CHICAGO
42	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10	30	SALES	CHICAGO
43	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20	40	OEPRATIONS	BOSTON
44	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	40	OEPRATIONS	BOSTON
45	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	40	OEPRATIONS	BOSTON
46	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	40	OEPRATIONS	BOSTON
46	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	40	OEPRATIONS	BOSTON
47	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	40	OEPRATIONS	BOSTON
48	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30	40	OEPRATIONS	BOSTON
49	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10	40	OEPRATIONS	BOSTON
50	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	40	OEPRATIONS	BOSTON
51	7839	KING	PRESIDENT	NULL	17-NOV-81	5000	NULL	10	40	OEPRATIONS	BOSTON
52	7844	TURNER	SALESMAN	7698	08-SEP-81	1500	NULL	30	40	OEPRATIONS	BOSTON
53	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20	40	OEPRATIONS	BOSTON
54	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30	40	OEPRATIONS	BOSTON
55	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20	40	OEPRATIONS	BOSTON
56	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10	40	OEPRATIONS	BOSTON

```

/* 5 */
select ( SUM(comm) / COUNT(EMPNO) ) AS ' Including NULL Values'
from Emp

```

```

select AVG(COMM) AS ' Excluding NULL Values'
from Emp

```

/* 5 */

```

select ( SUM(comm) / COUNT(EMPNO) ) AS ' Including NULL Values'
from Emp

select AVG(COMM) AS ' Excluding NULL Values'
from Emp

```

100 %

Including NULL Values	
1	157

Excluding NULL Values	
1	733

/* 6 */

```

select *
from Emp job, Emp emp
where job.EMPNO = emp.EMPNO

```

/* 6 */

```

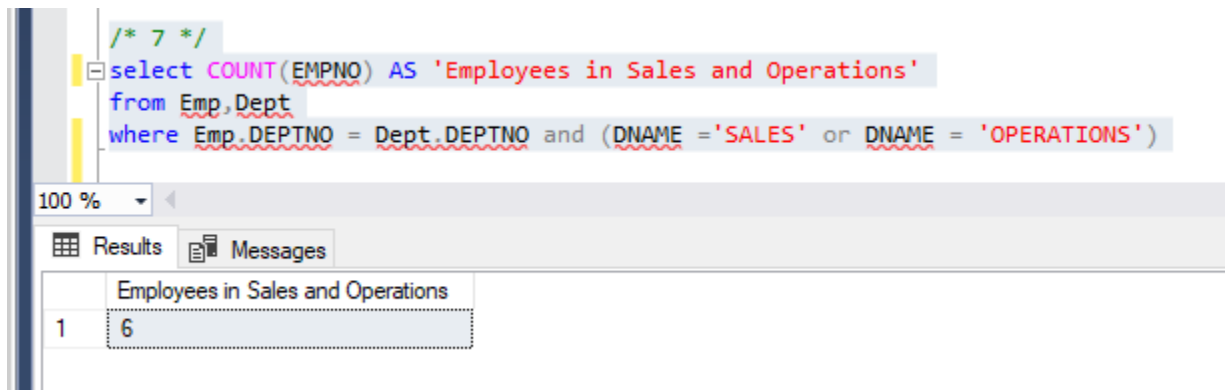
select *
from Emp job, Emp emp
where job.EMPNO = emp.EMPNO

```

100 %

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20	7369	SMITH	CLERK	7902	17-DEC-80	800	NULL	20
2	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
3	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
4	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20	7566	JONES	MANAGER	7839	02-APR-81	2975	NULL	20
5	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
6	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30	7698	BLAKE	MANAGER	7839	01-MAY-81	2850	NULL	30
7	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10	7782	CLARK	MANAGER	7839	09-JUN-81	2450	NULL	10
8	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20	7788	SCOTT	ANALYST	7566	09-DEC-82	3000	NULL	20
9	7839	KING	PRESIDE...	NU...	17-NOV-81	5000	NULL	10	7839	KING	PRESIDE...	NU...	17-NOV-81	5000	NULL	10
10	7844	TURN...	SALESMAN	7698	08-SEP-81	1500	NULL	30	7844	TURN...	SALESMAN	7698	08-SEP-81	1500	NULL	30
11	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20	7876	ADAMS	CLERK	7788	12-JAN-83	1100	NULL	20
12	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30	7900	JAMES	CLERK	7698	03-DEC-81	950	NULL	30
13	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20	7902	FORD	ANALYST	7566	03-DEC-81	3000	NULL	20
14	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10	7934	MILLER	CLERK	7782	23-JAN-82	1300	NULL	10

```
/* 7 */
select COUNT(EMPNO)
from Emp,Dept
where Emp.DEPTNO = Dept.DEPTNO and (DNAME = 'SALES' or DNAME = 'OPERATIONS')
```



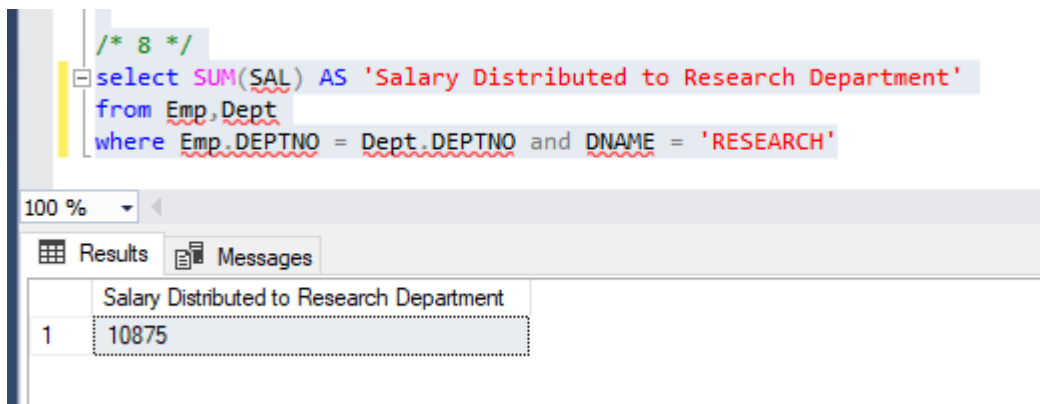
```
/* 7 */
select COUNT(EMPNO) AS 'Employees in Sales and Operations'
from Emp,Dept
where Emp.DEPTNO = Dept.DEPTNO and (DNAME = 'SALES' or DNAME = 'OPERATIONS')
```

100 %

Results Messages

Employees in Sales and Operations	
1	6

```
/* 8 */
select SUM(SAL) AS 'Salary Distributed to Research Department'
from Emp,Dept
where Emp.DEPTNO = Dept.DEPTNO and DNAME = 'RESEARCH'
```



```
/* 8 */
select SUM(SAL) AS 'Salary Distributed to Research Department'
from Emp,Dept
where Emp.DEPTNO = Dept.DEPTNO and DNAME = 'RESEARCH'
```

100 %

Results Messages

Salary Distributed to Research Department	
1	10875