

```
mysql> SELECT dname
-> FROM dept
-> WHERE deptno IN (SELECT deptno
-> FROM emp
-> WHERE ename='SCOTT');
```

```
+-----+
| dname  |
+-----+
| RESEARCH |
+-----+
```

```
mysql> SELECT ename
-> FROM emp
-> WHERE sal > (SELECT sal
-> FROM emp
-> WHERE ename='SMITH');
```

```
+-----+
| ename  |
+-----+
| ALLEN  |
| WARD   |
| JONES  |
| MARTIN |
| BLAKE  |
| CLARK  |
| SCOTT  |
| KING   |
| TURNER |
| ADAMS  |
| JAMES  |
| FORD   |
| MILLER |
+-----+
```

```
mysql> SELECT *
-> FROM emp
-> WHERE sal=(SELECT MAX(sal)
-> FROM emp);
```

```
+-----+-----+-----+-----+-----+-----+-----+
| empno | ename | job      | mgr  | hiredate | sal      | comm | deptno |
+-----+-----+-----+-----+-----+-----+-----+
| 7839  | KING  | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10     |
+-----+-----+-----+-----+-----+-----+-----+
```

```
mysql> SELECT *
-> FROM emp
-> WHERE sal = (SELECT MIN(sal)
-> FROM emp
-> WHERE job='MANAGER');
```

```
+-----+-----+-----+-----+-----+-----+-----+
| empno | ename | job      | mgr  | hiredate | sal      | comm | deptno |
+-----+-----+-----+-----+-----+-----+-----+
| 7782  | CLARK | MANAGER  | 7839 | 1981-06-09 | 2450.00 | NULL | 10     |
+-----+-----+-----+-----+-----+-----+-----+
```

```
mysql> SELECT *
-> FROM emp
-> WHERE sal>(SELECT AVG(sal)
-> FROM emp);
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-------|-----------|------|------------|---------|------|--------|
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |
| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |
| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 |
| 7839 | KING | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10 |
| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 |

Second Minimum Salary:

```
mysql> SELECT *
-> FROM emp
-> WHERE sal=(SELECT MIN(sal)
-> FROM emp
-> WHERE sal>(SELECT MIN(sal)
-> FROM emp));
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-------|-------|------|------------|--------|------|--------|
| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950.00 | NULL | 30 |

Third Minimum Salary:

```
mysql> SELECT *
-> FROM emp
-> WHERE sal=(SELECT MIN(sal)
-> FROM emp
-> WHERE sal>(SELECT MIN(sal)
-> FROM emp
-> WHERE sal>(SELECT MIN(sal)
-> FROM emp)));
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-------|-------|------|------------|---------|------|--------|
| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 |

1 row in set (0.00 sec)

Multi Row SubQuery:

```
mysql> select dname
-> from dept
-> where deptno in (select deptno
-> from emp
-> where ename in('smith','allen'));
```

| |
|----------|
| dname |
| RESEARCH |
| SALES |

```
mysql> SELECT ename,deptno,sal
-> FROM emp
-> WHERE sal>=ALL(SELECT sal
-> FROM emp
-> WHERE deptno=10);
```

| | | |
|-------|--------|---------|
| ename | deptno | sal |
| KING | 10 | 5000.00 |

```
mysql> SELECT *
-> FROM emp
-> WHERE empno=(SELECT mgr
-> FROM emp
-> WHERE ename='ALLEN');
```

| | | | | | | | |
|-------|-------|---------|------|------------|---------|------|--------|
| empno | ename | job | mgr | hiredate | sal | comm | deptno |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |

```
mysql> SELECT *
-> FROM emp
-> WHERE empno=(SELECT mgr
-> FROM emp
-> WHERE empno=(SELECT mgr
-> FROM emp
-> WHERE ename='smith'));
```

| | | | | | | | |
|-------|-------|---------|------|------------|---------|------|--------|
| empno | ename | job | mgr | hiredate | sal | comm | deptno |
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |

```
mysql> SELECT *
-> FROM emp
-> WHERE mgr=(SELECT empno
-> FROM emp
-> WHERE ename='KING');
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-------|---------|------|------------|---------|------|--------|
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 |
| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 |

```
mysql> SELECT *
-> FROM emp INNER JOIN dept
-> ON emp.deptno=dept.deptno;
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno | deptno | dname | loc |
|-------|--------|-----------|------|------------|---------|---------|--------|--------|------------|----------|
| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800.00 | NULL | 20 | 20 | RESEARCH | DALLAS |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600.00 | 300.00 | 30 | 30 | SALES | CHICAGO |
| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250.00 | 500.00 | 30 | 30 | SALES | CHICAGO |
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL | 20 | 20 | RESEARCH | DALLAS |
| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250.00 | 1400.00 | 30 | 30 | SALES | CHICAGO |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850.00 | NULL | 30 | 30 | SALES | CHICAGO |
| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450.00 | NULL | 10 | 10 | ACCOUNTING | NEW YORK |
| 7788 | SCOTT | ANALYST | 7566 | 1982-12-09 | 3000.00 | NULL | 20 | 20 | RESEARCH | DALLAS |
| 7839 | KING | PRESIDENT | NULL | 1981-11-17 | 5000.00 | NULL | 10 | 10 | ACCOUNTING | NEW YORK |
| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500.00 | 0.00 | 30 | 30 | SALES | CHICAGO |
| 7876 | ADAMS | CLERK | 7788 | 1983-01-12 | 1100.00 | NULL | 20 | 20 | RESEARCH | DALLAS |
| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950.00 | NULL | 30 | 30 | SALES | CHICAGO |
| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000.00 | NULL | 20 | 20 | RESEARCH | DALLAS |
| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300.00 | NULL | 10 | 10 | ACCOUNTING | NEW YORK |

```
mysql> SELECT e1.ename emp_name,e2.ename mgr_name
-> FROM emp e1,emp e2
-> WHERE e1.mgr=e2.empno AND e1.job = 'CLERK';
```

| emp_name | mgr_name |
|----------|----------|
| JAMES | BLAKE |
| MILLER | CLARK |
| ADAMS | SCOTT |
| SMITH | FORD |

```
mysql> SELECT e1.ename emp_name,e2.sal mgr_sal
-> FROM emp e1,emp e2
-> WHERE e1.mgr=e2.empno AND e2.sal>2300 and e1.sal>2300;
```

| emp_name | mgr_sal |
|----------|---------|
| FORD | 2975.00 |
| SCOTT | 2975.00 |
| CLARK | 5000.00 |
| BLAKE | 5000.00 |
| JONES | 5000.00 |