

# 보고서

## 문항 1

1-1)

```
select deptno, grade, count(*), avg(weight) from student
group by deptno, grade;
```

```
mysql> select deptno, grade, count(*), avg(weight) from student
-> group by deptno, grade;
```

deptno	grade	count(*)	avg(weight)
101	1	2	62.0000
101	3	1	88.0000
101	2	3	56.0000
101	4	1	92.0000
102	2	1	48.0000
102	4	1	92.0000
102	1	1	68.0000
102	3	1	70.0000
201	1	3	65.3333
201	2	1	51.0000

10 rows in set (0.00 sec)

1-2)

```
select grade, count(*), avg(height), avg(weight) from student
group by grade
having count(*) > 4;
```

```
mysql> select grade, count(*), avg(height), avg(weight) from student
-> group by grade
-> having count(*) > 4;
```

grade	count(*)	avg(height)	avg(weight)
1	6	175.3333	64.6667
2	5	164.8000	53.4000

2 rows in set (0.00 sec)

1-3)

```
select deptno, avg(sal), min(sal), max(sal) from professor
group by deptno;
```

```
mysql> select deptno, avg(sal), min(sal), max(sal) from professor
-> group by deptno;
+-----+-----+-----+-----+
| deptno | avg(sal) | min(sal) | max(sal) |
+-----+-----+-----+-----+
|      101 | 372.5000 |      210 |      500 |
|      102 | 345.0000 |      240 |      450 |
|      201 | 320.0000 |      320 |      320 |
|      202 | 400.0000 |      400 |      400 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

1-4)

```
select deptno, avg(weight), count(*) from student
group by deptno
order by avg(weight) desc;
```

```
mysql> select deptno, avg(weight), count(*) from student
-> group by deptno
-> order by avg(weight) desc;
+-----+-----+-----+
| deptno | avg(weight) | count(*) |
+-----+-----+-----+
|      102 |      69.5000 |         4 |
|      101 |      67.4286 |         7 |
|      201 |      61.7500 |         4 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

1-5)

```
select deptno, count(*) from professor
group by deptno
having count(*) <= 2
order by deptno;
```

```
mysql> select deptno, count(*) from professor
      -> group by deptno
      -> having count(*) <= 2
      -> order by deptno;
```

deptno	count(*)
102	2
201	1
202	1

3 rows in set (0.00 sec)

## 문항 2

2-1)

```
select studno, name, grade from student
where grade = (
  select grade from student where userid = 'jun123'
);
```

```
mysql> select studno, name, grade from student
      -> where grade = (
      ->   select grade from student where userid = 'jun123'
      -> );
```

studno	name	grade
10101	전인하	4
10107	이광훈	4
10202	오유석	4

3 rows in set (0.00 sec)

2-2)

```
select name, deptno, weight from student
where weight < (
  select avg(weight) from student where deptno = 101
);
```

```
mysql> select name, deptno, weight from student
-> where weight < (
->   select avg(weight) from student where deptno = 101
-> );
```

name	deptno	weight
박미경	101	52
지은지	101	42
임유진	101	54
김진영	102	48
이동훈	201	64
김진경	201	51
조명영	201	62

7 rows in set (0.00 sec)

2-3)

```
select s.name, s.weight, d.dname, p.name from student s
inner join department d on s.deptno = d.deptno
inner join professor p on p.profno = s.profno
where weight < (
  select avg(weight) from student where deptno=(
    select deptno from student where name='이광훈'
  )
);
```

```
mysql> select s.name, s.weight, d.dname, p.name from student s
-> inner join department d on s.deptno = d.deptno
-> inner join professor p on p.profno = s.profno
-> where weight < (
->   select avg(weight) from student where deptno=(
->     select deptno from student where name='이광훈'
->   )
-> );
```

name	weight	dname	name
지은지	42	컴퓨터공학과	전은지
임유진	54	컴퓨터공학과	전은지
김진영	48	멀티미디어학과	권혁일
김진경	51	전자공학과	이재우

4 rows in set (0.00 sec)

2-4)

```
select name, grade, height from student
where grade = (select grade from student where studno=20101)
and height > (select height from student where studno=20101);
```

```
mysql> select name, grade, height from student
-> where grade = (select grade from student where studno=20101)
-> and height > (select height from student where studno=20101);
```

name	grade	height
서재진	1	186
박동진	1	182
조명훈	1	184

3 rows in set (0.00 sec)

2-5)

```
select s.studno, d.dname, s.grade, s.name from student s
inner join department d on d.deptno = s.deptno
where s.deptno in (
  select deptno from department where dname like "%공학%"
);
```

```
mysql> select s.studno, d.dname, s.grade, s.name from student s
-> inner join department d on d.deptno = s.deptno
-> where s.deptno in (
->   select deptno from department where dname like "%공학%"
-> );
```

studno	dname	grade	name
10101	컴퓨터공학	4	전인하
10102	컴퓨터공학	1	박미영
10103	컴퓨터공학	3	김지민
10104	컴퓨터공학	2	김지민
10105	컴퓨터공학	2	김지민
10106	컴퓨터공학	1	서재진
10107	컴퓨터공학	4	이광민
10108	컴퓨터공학	2	류민준
20101	전자공학	1	이박동
20102	전자공학	1	박동진
20103	전자공학	2	김지민
20104	전자공학	1	조명훈

12 rows in set (0.00 sec)