

# Day 10. Sub Query

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## [실습 데이터]

- mypokemon

	number	name
▶	10	caterpie
	25	pikachu
	26	raichu
	133	eevee
	152	chikoirita

- ability

	number	type	height	weight	attack	defense	speed
▶	10	bug	0.3	2.9	30	35	45
	25	electric	0.4	6	55	40	90
	26	electric	0.8	30	90	55	110
	133	normal	0.3	6.5	55	50	55
	152	grass	0.9	6.4	49	65	45

## ▼ Query

```
DROP DATABASE IF EXISTS pokemon;
CREATE DATABASE pokemon;
USE pokemon;
CREATE TABLE mypokemon (
    number INT,
    name VARCHAR(20)
);
INSERT INTO mypokemon (number, name)
VALUES (10, 'caterpie'),
       (25, 'pikachu'),
       (26, 'raichu'),
```

```

        (133, 'eevee'),
        (152, 'chikoirita');
CREATE TABLE ability (
    number INT,
    type VARCHAR(10),
    height FLOAT,
    weight FLOAT,
    attack INT,
    defense INT,
    speed int
);
INSERT INTO ability (number, type, height, weight, attack,
VALUES (10, 'bug', 0.3, 2.9, 30, 35, 45),
        (25, 'electric', 0.4, 6, 55, 40, 90),
        (26, 'electric', 0.8, 30, 90, 55, 110),
        (133, 'normal', 0.3, 6.5, 55, 50, 55),
        (152, 'grass', 0.9, 6.4, 49, 65, 45);

```

## [실습 1]

### ▼ Mission

```

/*
MISSION (1)
내 포켓몬 중에 몸무게가 가장 많이 나가는 포켓몬의 번호를 가져와 주세요.
*/
select number, weight, weight_rank
from (select number, weight, rank() over(order by weight d
        from ability) as T1
where weight_rank = 1;

```

	number	weight	weight_rank
▶	26	30	1

	number	weight	weight_rank
▶	26	30	1
	133	6.5	2
	152	6.4	3
	25	6	4
	10	2.9	5

```

/*
MISSION (2)
속도가 모든 전기 포켓몬의 공격력보다 하나라도 작은 포켓몬의 번호를 가져와
*/
select number
from ability
where speed < any (select attack from ability where type =

```

	number	speed
▶	10	45
	133	55
	152	45

	number	type	height	weight	attack	defense	speed
▶	25	electric	0.4	6	55	40	90
	26	electric	0.8	30	90	55	110

```

/*
MISSION (3)
공격력이 방어력보다 큰 포켓몬이 있다면 모든 포켓몬의 이름을 가져와 주세요
*/
select name
from mypokemon
where exists (select *
              from ability
              where defense < attack);

```

	name
▶	caterpie
	pikachu
	raichu
	eevee
	chikoirita

```

/*
MISSION (*)
공격력이 방어력보다 큰 포켓몬의 이름을 가져와 주세요.
*/
select number, name
from mypokemon
where number IN(select number
                  from ability
                  where defense < attack);

```

	number	name
▶	25	pikachu
	26	raichu
	133	eevee

	number	type	height	weight	attack	defense	speed
▶	25	electric	0.4	6	55	40	90
	26	electric	0.8	30	90	55	110
	133	normal	0.3	6.5	55	50	55

## [실습 2]

### ▼ Mission

```

/*
MISSION (1)
이브이의 번호 133을 활용해서, 이브이의 영문 이름, 키, 몸무게를 가져와
이 때, 키는 height, 몸무게는 weight이라는 별명으로 가져와 주세요.
*/
select name,
       (select height from ability where number = 133) AS
       (select weight from ability where number = 133) AS wei
from mypokemon
where number = 133;

```

	name	height	weight
▶	eevee	0.3	6.5

```

/*
MISSION (2)
속도가 2번째로 빠른 포켓몬의 번호와 속도를 가져와 주세요.
*/
select number, speed, speed_rank
from (select number, speed, rank() over(order by speed desc) as speed_rank
where speed_rank = 2;

```

	number	speed	speed_rank
▶	25	90	2

```

select name
from mypokemon
where number in (select number
                  from ability
                  where defense > ALL (select defense
                                       from ability
                                       where type = 'defense'));

```

	name
▶	chikoirita