NESTED QUERIES
Subqueries inside WHERE

Asian countries below average `fert_rate`

```
SELECT name, fert_rate
FROM states
WHERE continent = 'Asia'
    AND fert_rate <
        (SELECT AVG(fert_rate)
         FROM states);
```

```
+---------+-------------+
| name    |   fert_rate |
|---------+-------------|
| Brunei  |        1.96 |
| Vietnam |        1.7  |
+---------+-------------+
```

Subqueries inside SELECT

Subquery inside SELECT clause - complete

```
SELECT DISTINCT continent,
    (SELECT COUNT(*)
     FROM states
     WHERE prime_ministers.continent = states.continent) AS countries_num
FROM prime_ministers;
```

```
+---------------+-----------------+
| continent     |   countries_num |
|---------------+-----------------|
| Africa        |               2 |
| Asia          |               4 |
| Europe        |               3 |
| North America |               1 |
| Oceania       |               1 |
+---------------+-----------------+
```

Note: We have specified DISTINCT because, each continent will have multiple rows

having the same countries_num value

```
-- Select fields
Select *
  -- From populations
From populations
-- Where life_expectancy is greater than
Where life_expectancy > 1.15 * (
  Select avg(life_expectancy)
  From populations
  Where year = 2015
  ) and year = 2015;
```

```
SELECT countries.name AS country,
  -- Subquery
  (SELECT count(*)
   FROM cities
   WHERE countries.code = cities.country_code) AS cities_num
FROM countries
ORDER BY cities_num DESC,  country
LIMIT 9;
```

country	cities_num
China	36
India	18
Japan	11
Brazil	10
Pakistan	9
United States	9

Subquery inside FROM clause

- **Using Subquery as a temporary table in the subclause**

```sql
SELECT DISTINCT monarchs.continent, subquery.max_perc
FROM monarchs,
    (SELECT continent, MAX(women_parli_perc) AS max_perc
     FROM states
     GROUP BY continent) AS subquery
WHERE monarchs.continent = subquery.continent
ORDER BY continent;
```

```
+-------------+------------+
| continent   |   max_perc |
|-------------+------------|
| Asia        |       24   |
| Europe      |       39.6 |
+-------------+------------+
```