DB Assignment

2019.4.9
이창윤

Join 의미 이해 문제

```
use 학사db;

# 1. 두 테이블에 대한 join

select S.name as 이름, CT.cid as 과목코드, CT.grade as 학점
from student as S, course_taken as CT
where S.id = CT.sid;

# 2. 세 테이블에 대한 join

select S.name as 이름, C.name as 과목명, CT.grade as 학점
from student as S, course as C, course_taken as CT
where S.id = CT.sid and C.id = CT.cid;
```

1.

이름	과목코드	학점
한나라	cs111	2
한나라	cs211	4
한나라	cs221	3
한나라	cs222	3
한나라	cs311	3
한나라	cs321	4
한나라	cs411	4
강동희	ss111	2
강동희	cs111	4
강동희	cs221	4
강동희	ss311	4
강동희	ss312	4
강동희	ss321	3
허영만	cs111	2
허영만	cs211	2
허영만	cs222	1

2.

이름	과목명	학점
한나라	기초전산	2
한나라	수치해석	4
한나라	자료구조론	3
한나라	시스템프로그래밍	3
한나라	컴퓨터 구조론	3
한나라	프로그래밍언어론	4
한나라	데이타베이스	4
강동희	전산통계	2
강동희	기초전산	4
강동희	자료구조론	4
강동희	응용해석학	4
강동희	통계적 품질관리	4
강동희	회귀분석	3
허영만	기초전산	2
허영만	수치해석	2
허영만	시스템프로그래밍	1

SQL문 문제 - A

```
# A-1

select S.name as 이름, C.name as 교과명, D.name 학과명
from student as S, course as C, department as D, course_taken as CT
where C.instructor in (select I.pid from instructor as I where I.name = '이창택')
and   C.id = CT.cid and S.id = CT.sid
and   S.major in (null, D.id);
```

1.

이름	교과명	학과명
▶ 강동희	전산통계	통계전공
이미숙	전산통계	통계전공
강동희	회귀분석	통계전공

```
# A-2

• select S.name as 이름
  from student as S
  where S.name not in (select S.name
                       from   student as S, course_taken as CT
                       where  CT.cid IN ('ss111','ss311','ss312','ss321')
                       and    CT.sid = S.id);
```

2.

이름
▶ 한나라
허영만
이동주
조용필
조용기

SQL문 문제 - A

```
# A-3

select distinct C.id as 과목번호, C.name as 과목명
from course as C, course_taken as CT
where C.id not in (select CT.cid
                    from course_taken as CT
                    where CT.year_taken in (1997, 1998));
```

3.

과목 번호	과목명
► cs312	알고리즘
cs322	운영체제
cs413	컴퓨터네트워크
cs421	소프트웨어 공학

4.

이 름
► 한나라
허영만

```
# A-4

select S.name as 이름
from student as S
where S.id in (select CT.sid from course_taken as CT, course as C where C.name = '기초전산' and C.id = CT.cid)
and   S.id in (select CT.sid from course_taken as CT, course as C where C.name = '데이타베이스' and C.id = CT.cid);
```

SQL문 문제 - B

```
use world;

# B-1

select count(C.id) as '도시 수'
from city as C, country as N
where N.Name = 'China' and N.code = C.CountryCode;


# B-2

select N.Name as 이름, N.Population as '인구 수'
from country as N
where N.Population in (select min(Population) from country);
```

1.

도시 수
363

2.

이름	인구 수
Antarctica	0
French Southern territories	0
Bouvet Island	0
Heard Island and McDonald Islands	0
British Indian Ocean Territory	0
South Georgia and the South Sandwich Islands	0
United States Minor Outlying Islands	0

SQL문 문제 - B

3.

언어
Dutch
English
Papiamento
Spanish
Creole English
Creole French
Bajan
French
Haiti Creole
Hindi

```
# B-3

select distinct CN.Language as 언어
from countrylanguage as CN
where CN.CountryCode in (select Code from country where Region = 'Caribbean');


# B-4

select distinct N.Code as 지역코드, N.Name as 이름
from country as N, countrylanguage as CN
where N.Code not in (select CountryCode from countrylanguage);
```

4.

지역 코드	이름
ATA	Antarctica
ATF	French Southern territories
BVT	Bouvet Island
HMD	Heard Island and McDonald Islands
IOT	British Indian Ocean Territory
SGS	South Georgia and the South Sandwich Islands

SQL문 문제 - B

```
# B-5
```

- ```
  select C1.Name as 도시명, C1.id as 코드1, C2.id as 코드2
  from city as C1, city as C2
  where C1.Name = C2.Name and C1.ID <> C2.ID;
  ```

5.

도시명	코드1	코드2
▶ Ede	2759	29
Saint JohnÂ´s	1851	63
CÃ³rdoba	664	71
CÃ³rdoba	2600	71
San Miguel	649	95
San Miguel	843	95
San Fernando	802	109
San Fernando	876	109
San Juan	2919	118
Newcastle	734	137
Hamilton	1821	191
Hamilton	3501	191
La Paz	2586	194
La Paz	2589	194
Santa Maria	828	293

SQL문 문제 - C

- use pubs;

  # C-1

- select T.title as 제목
  from titles as T, publishers as P
  where T.pub_id in (select pub_id from publishers where pub_name = 'Binnet & Hardley');

  # C-2

- select concat(E.fname, ' ', E.lname) as 이름
  from employee as E
  where E.hire_date between '1990-01-01' and '1990-12-31';

1.

제목
▶ Silicon Valley Gastronomic Treats
The Gourmet Microwave
The Psychology of Computer Cooking
Computer Phobic AND Non-Phobic Individuals: B...
Onions, Leeks, and Garlic: Cooking Secrets of t...
Fifty Years in Buckingham Palace Kitchens
Sushi, Anyone?
Silicon Valley Gastronomic Treats
The Gourmet Microwave
The Psychology of Computer Cooking
Computer Phobic AND Non-Phobic Individuals: B...
Onions, Leeks, and Garlic: Cooking Secrets of t...
Fifty Years in Buckingham Palace Kitchens
Sushi, Anyone?
Silicon Valley Gastronomic Treats
The Gourmet Microwave
The Psychology of Computer Cooking

2.

이름
▶ Annette Roulet
Daniel Tonini
Elizabeth Lincoln
Francisco Chang
Laurence Lebihan
Martin Sommer
Pedro Afonso
Victoria Ashworth

SQL문 문제 - D

- use classicmodels;

  # D-1

- select O.orderNumber as 주문번호, C.customerName as '고객 이름', E.lastName as 직원명, O.orderDate as '주문 일자', O.comments as 이유
  from orders as O, customers as C, employees as E
  where O.status = 'Resolved'
  and   C.customerNumber = O.customerNumber
  and   C.salesRepEmployeeNumber = E.employeeNumber;

  # D-2

- select P.productName as 상품명
  from products as P, orderdetails as OT
  where OT.orderNumber = 10100
  and   OT.productCode = P.productCode;

1.

주문 번호	고객 이름	직원명	주문 일 자	이유
▶ 10164	Mini Auto Werke	Castillo	2003-10-21	This order was disputed, but resolved on 11/1/...
10327	Danish Wholesale Imports	Castillo	2004-11-10	Order was disputed and resolved on 12/1/04. T...
10367	Toys4GrownUps.com	Thompson	2005-01-12	This order was disputed and resolved on 2/1/20...
10386	Euro+ Shopping Channel	Hernandez	2005-03-01	Disputed then Resolved on 3/15/2005. Custom...

2.

상품명
▶ 1917 Grand Touring Sedan
1911 Ford Town Car
1932 Alfa Romeo 8C2300 Spider Sport
1936 Mercedes Benz 500k Roadster