*-- lets play with pets*

**USE** people;

*-- How many pets does each person have?*

**SELECT pers\_id**, **pers\_name**, *COUNT*(pet\_id) **AS** npets

**FROM** person

**JOIN** pet **ON** person.**pers\_id** = pet.owner\_id

**GROUP BY pers\_id**;

*-- B isn't there? But they have 0 pets*

**SELECT pers\_id**, **pers\_name**, *COUNT*(pet\_id) **AS** npets

**FROM** person

**LEFT OUTER JOIN** pet **ON** person.**pers\_id** = pet.owner\_id

**GROUP BY pers\_id**;

*-- What does outer join do underneath?*

**SELECT pers\_id**, **pers\_name**, pet\_id, pet\_name

**FROM** person **LEFT OUTER JOIN** pet **ON** person.**pers\_id** = pet.owner\_id;

*-- 'JOIN' is a synonym for 'INNER JOIN'*

**SELECT pers\_id**, **pers\_name**, pet\_id, pet\_name

**FROM** person **INNER JOIN** pet **ON** person.**pers\_id** = pet.owner\_id;

*-- Views*

**use** charity;

**CREATE VIEW** year\_donations

**AS SELECT** *EXTRACT*(**YEAR FROM gift\_date**) **AS year**,

*COUNT*(**DISTINCT gift\_id**) **AS** gift\_count,

*SUM*(**amount**) **AS** total\_gifts

**FROM** gift

**JOIN** gift\_fund\_allocation **USING** (**gift\_id**)

**GROUP BY year**;

*-- Subselects*

**USE** hcibib;

*-- How many papers have people written?*

**SELECT** author\_id, author\_name, *COUNT*(*\**) **AS** paper\_count

**FROM** author

**JOIN** article\_author **USING** (author\_id)

**GROUP BY** author\_id;