Homework 3

1) SELECT name as artist_name FROM artists;

$\pi_{name = artist\_name}(artists)$

2) SELECT years FROM albums WHERE years > 1990 AND years < 199...

$\pi_{years}(\sigma_{years > 1990 \text{ AND } years < 1995}(albums))$

3) SELECT * FROM albums JOIN artists ON artist.id = albums.artist...

albums $\bowtie_{artist.id = albums.artist\_id} \rho(artists)$

4) SELECT artists.name, albums.title FROM artists, album...

$\pi_{artists.name, albums.title}(artists \times albums)$

5) SELECT * FROM artists LEFT JOIN albums ON artists.id = albums.artis...

albums $\bowtie_{artists.id = albums.artist\_id} \rho(artists)$

6) SELECT * FROM albums LEFT JOIN artists ON albums.artist_id = artist.id;

albums $\bowtie_{artists.id = albums.artis\_id} \rho(artists)$

Broc   Nickodemus

```
                              Alias
SELECT    name    as    artist_name   FROM   artists;
SELECT    name    as   'artist name'  FROM   artists  as  'musicians'
LIKE    '%s%'   LIMIT  1   ORDER  BY   name
SELECT    DISTINCT          IS  NOT  NULL
SELECT    count(*) , zip_code   FROM    artists
                     aggregate
   GROUP   BY   zip_code   HAVING    zip_code < 97703;
```

```
SELECT    year    FROM    albums
WHERE    year  >  1990
AND    year  <   1995
```

```
ALTER  TABLE   tblname    rename   to  ___  |  add column ___
SELECT   artist.name,    title     FROM    artists, album
WHERE   artits.id  =  albums. artist_id;
```
same

```
SELECT   *  FROM   artists
JOIN    albums   on    artist.id  =  albums. artist_id;
regular  join
Left   join
right   join
```