**CSCI 490 Research Query Results**

**Ethnicity**

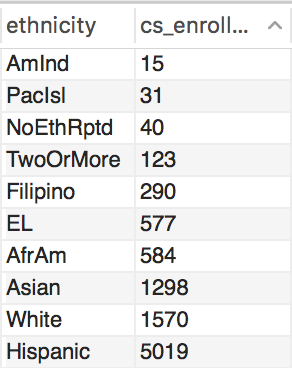
1. What is the overall distribution of ethnicities in Los Angeles County schools?
2. What is the distribution of ethnicities among schools that offer Computer Science (CS)?
3. What is the distribution of ethnicities enrolled in CS?

SELECT ethnicities.ethnicity, SUM(`cs\_enrollment`) `cs\_enrollment`

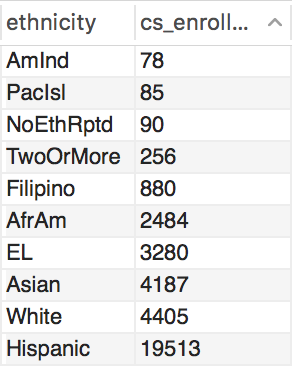
FROM ethnicities

INNER JOIN cs\_enrollments ON cs\_enrollments.ethnicity\_id=ethnicities.ethnicity\_id

GROUP BY ethnicities.ethnicity;



Query Result : CS enrollment by ethnicity for 2014-2015



Query Result : CS enrollment by ethnicity from 2012-2015

**Income**

1. What is the overall distribution of income in Los Angeles County schools?
2. What is the distribution of income among schools that offer Computer Science?

MySQL Query : What is the distribution of income among schools that offer Computer Science?

SELECT

CASE

WHEN FRPM\_eligible\_percent > 0.8 THEN '80-100% FRPM-eligible'

WHEN FRPM\_eligible\_percent BETWEEN 0.6 AND 0.8 THEN '60-80% FRPM-eligible'

WHEN FRPM\_eligible\_percent BETWEEN 0.4 AND 0.6 THEN '40-60% FRPM-eligible'

WHEN FRPM\_eligible\_percent BETWEEN 0.2 AND 0.4 THEN '20-40% FRPM-eligible'

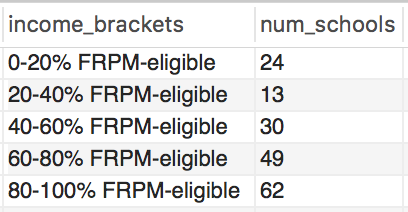
ELSE '0-20% FRPM-eligible'

END AS 'income\_brackets',

COUNT(\*) AS num\_schools

FROM school\_info

GROUP BY income\_brackets;



Query Result : FRPM distribution for all CS-offering schools

3. What percentage of the students taking CS attend a low-income school? "High-income" school?\*

**Gender**

1. What is the gender distribution of Los Angeles County?
2. What is the gender distribution among schools that offer Computer Science (CS)?
3. What is the gender distribution of students enrolled in CS?

SELECT

CASE

WHEN gender\_id = '1' THEN 'Male'

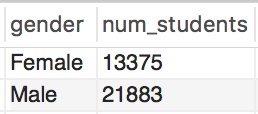
ELSE 'Female'

END AS 'gender',

SUM(cs\_enrollment) AS num\_students

FROM cs\_enrollments

GROUP BY gender;



Query Result : Overall gender distribution from 2012-2015

4. How does this compare to the gender distribution of the school?

5. What is the gender distribution at every income tier in Los Angeles County?

6. What is the gender distribution of the ethnicities enrolled in CS?  Female Asians may be more encouraged to participate in STEM courses than female Hispanics.

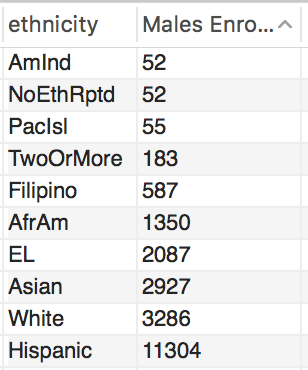
SELECT ethnicities.ethnicity, SUM(`cs\_enrollment`) AS `Males Enrolled`

FROM ethnicities

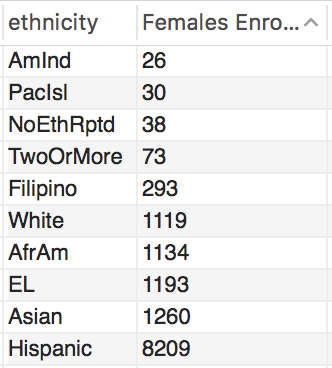
INNER JOIN cs\_enrollments ON cs\_enrollments.ethnicity\_id=ethnicities.ethnicity\_id

WHERE gender\_id = 1

GROUP BY ethnicities.ethnicity;



Query Result : Males enrolled in CS from 2012 - 2015



Query Result : Females Enrolled in CS from 2012-2015