

## Question:

### Part A:

Can I create a visual graph in Processing that will reveal the data I have gathered and help support a hypothetical relationship between two entities or occurrences?

### Part B:

If so, will I be able to see if there is any type of relationship between the months in a year and human pregnancies? I'd like to know if certain months are more popular than others and possibly explore deeper as to why.

### Part C:

Will I be able to get the information and the answers I am looking for by using data from the Seattle Public Library?

- I will search the library's database from years 2005-2011 and look for all items checked out with "pregnant" in the title and visually graph that data versus each month in those years to see if I can find a relationship.
- My graph will be based on large rectangles that represent a certain month in a certain year. My color scheme will be directly related to these rectangles along with my collected data. The rectangles with the most data will be darker than the others.

**Query:** (84 Rows affected in a time of 1.4ms)

Select year(cout), month(cout), count(\*) from inraw where title like "%pregnan%" and cout > "2005-01-01" and cout < '2012-01-01' group by month(cout), year(cout) order by year(cout), month(cout);

*I want to get the total number of item checkouts from this database where the titles include the word "pregnan" and are between the dates of 01/01/05 and 01/01/12. Take these numbers and group them together by the months and years and then order them for me by year.*

- I chose "pregnan" so the query wasn't limited by the word "pregnant" incase something had "pregnancy" in a title or something similar

- The grouping and ordering method returns data to me in a way that is easy to enter sequentially in my graph through Processing

**Analysis:**

- What kind of relationship does this show?
- Definitely a concentrated area of darkness = popular checkout
- Do people check out this info when they find out or later in the pregnancy?
- Possibly look 8-9 months before...
- Strange data info in 2005, not accurate possibly?
- A few strange outliers in some years

**Further Work/Development:**

- Add another layer/event to this graph and look at different subjects?
- Improve and add interactivity items
  - o Text color/size on rollover pop-up