

Part 1:

Question 1:

```
SELECT author_name, author_id, iss_date, EXTRACT(year from iss_date)
AS iss_year
FROM author
JOIN article_author USING (author_id)
JOIN article USING (article_id)
JOIN issue USING(issue_id)
WHERE article_id = %s
ORDER BY position
```

This is the query was used to get the names, and ID's of the authors of a given article. The query also gets the issue date as a year. This query was run as a nested for loop within the articles query by issue. So for each article this query generates a list of articles and the date for the citation that was requested.

Question 2:

Formatting:

The SQL was used strictly for gathering information. The python script handled some of my formatting by placing the query above in a nested loop. The query that came before generated a list of articles so I used python to generate a list of authors within the list of articles and I appended this information one article at a time. Jinja2 was used for most of the formatting. After all of the needed information was gathered I set up the HTML so that I could run a for loop over each article. Within this for loop was the widget that was also used in part 2. The widget handled the logic for “,” and “and” for the citation as well as arranging all of the previously gathered information in the correct format for the citation.

Part 2:

Query #1:

```
SELECT author_name
FROM author
WHERE author_id = %s
```

Query #2:

```
SELECT title, article_id, iss_number, iss_volume, iss_title, issue_id,
iss_date, EXTRACT(year from iss_date) AS iss_year, pub_id, pub_title
FROM article
JOIN article_author USING (article_id)
JOIN author USING(author_id)
JOIN issue USING(issue_id)
JOIN publication USING(pub_id)
WHERE author_id = %s
GROUP BY title, article_id, iss_number, iss_volume, iss_title,
issue_id, iss_date, iss_year,
pub_id, pub_title
```

Query #3:

```
SELECT COUNT(article_id) AS num_paps
FROM article
JOIN article_author USING(article_id)
JOIN author USING(author_id)
WHERE author_id = %s
```

Description:

The first query just grabs the name of the author when provided with a given author id.

The second query gets the article title, article id, issue number, issue volume, issue title, issue id, issue date as year, publication id, and the publication title when provided for all articles that a given author has written. The third query generates the number of articles written by a given author.