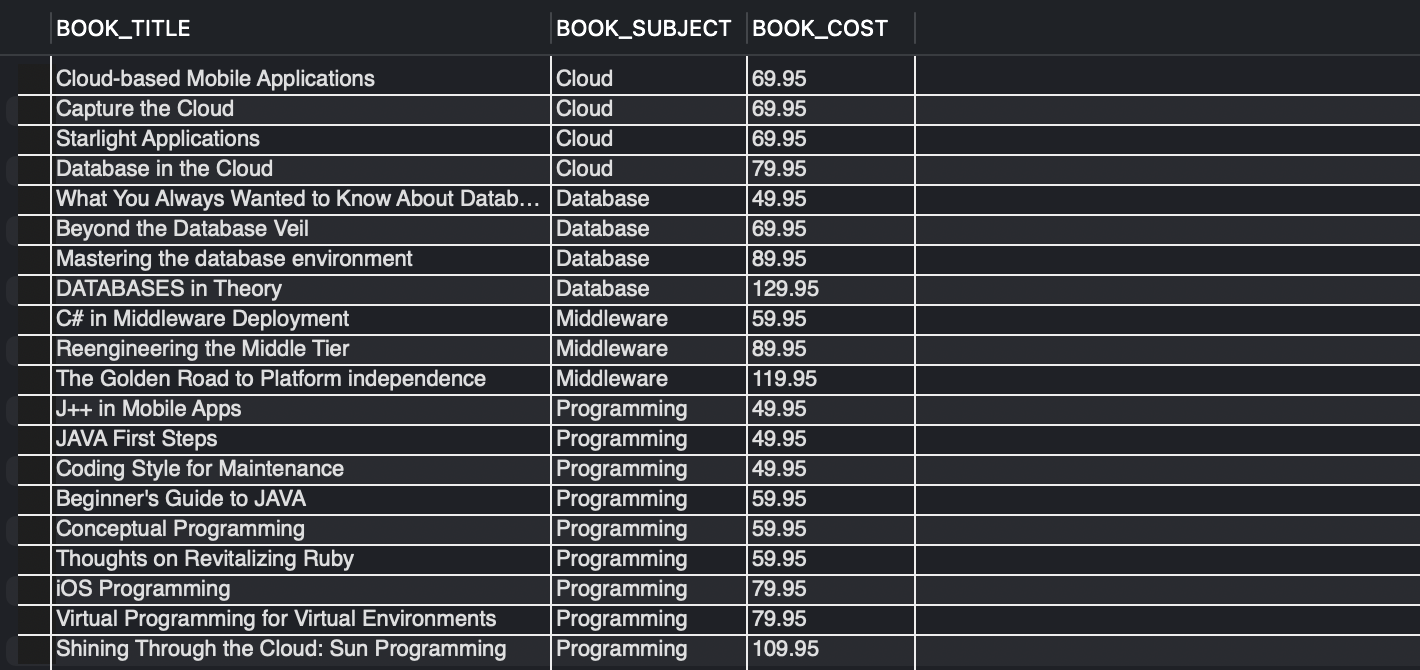
1) I want to know how much each book costs - include the title, subject, and cost. Sort the books by subject first, then cost with the lowest cost book listed first.

SELECT BOOK\_TITLE, BOOK\_SUBJECT, BOOK\_COST

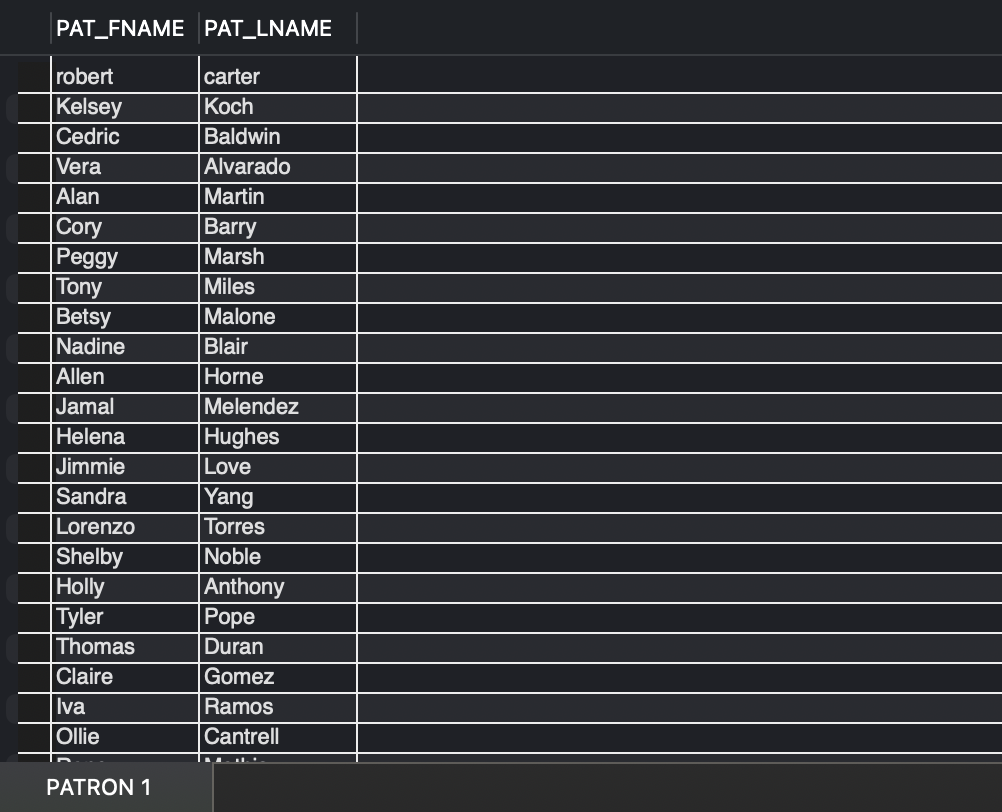
FROM BOOK

ORDER BY BOOK\_SUBJECT, BOOK\_COST asc;



2) What are the names of all our patrons?

SELECT PAT\_FNAME, PAT\_LNAME

FROM PATRON

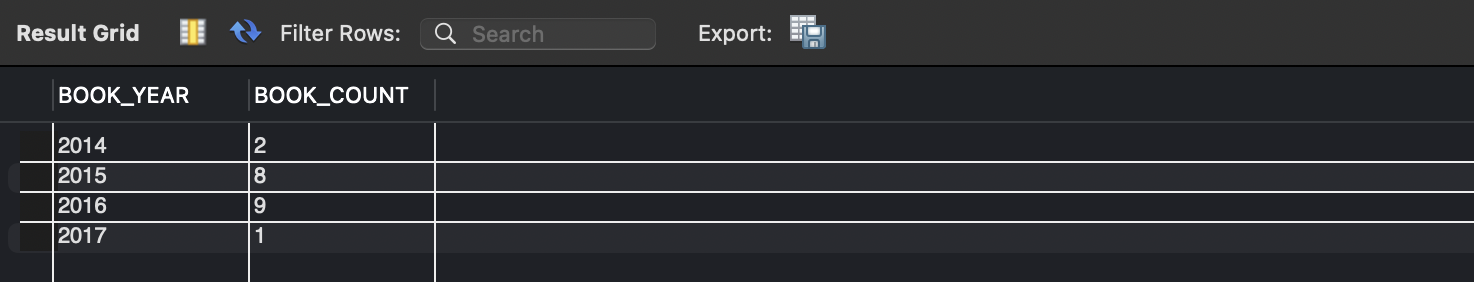
3) What years were books published? Each year should only return one time. Bonus question: How many books were published in that year?

SELECT DISTINCT BOOK\_YEAR, COUNT(\*) AS BOOK\_COUNT

FROM BOOK

GROUP BY BOOK\_YEAR

ORDER BY BOOK\_YEAR;

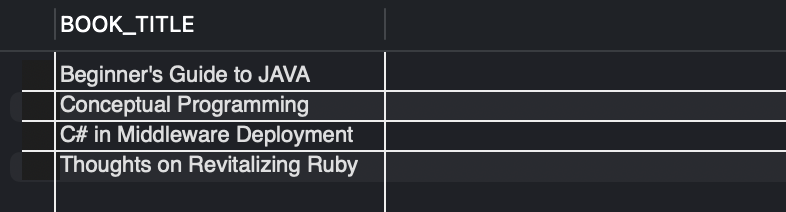


4) Find all the titles of books that cost 59.95

SELECT BOOK\_TITLE

FROM BOOK

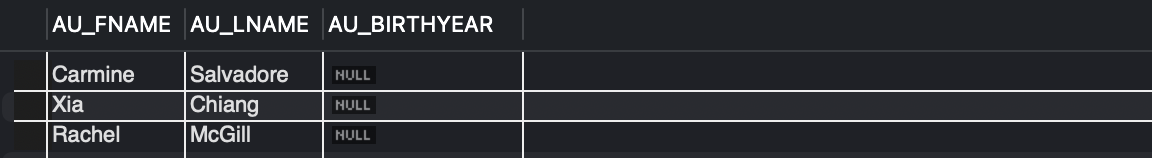
WHERE BOOK\_COST = 59.95;



5) Some authors are missing birthday information. Provide a list of authors first and last names where Birthdate is missing (null).

SELECT AU\_FNAME, AU\_LNAME, AU\_BIRTHYEAR

FROM AUTHOR

WHERE AU\_BIRTHYEAR IS NULL;

6) I need a list of authors and how many books each author has written. Use the full author's name provide the number of books they wrote (hint: use COUNT).

SELECT CONCAT(AUTHOR.AU\_FNAME, ' ', AUTHOR.AU\_LNAME) AS AUTHOR\_NAME,

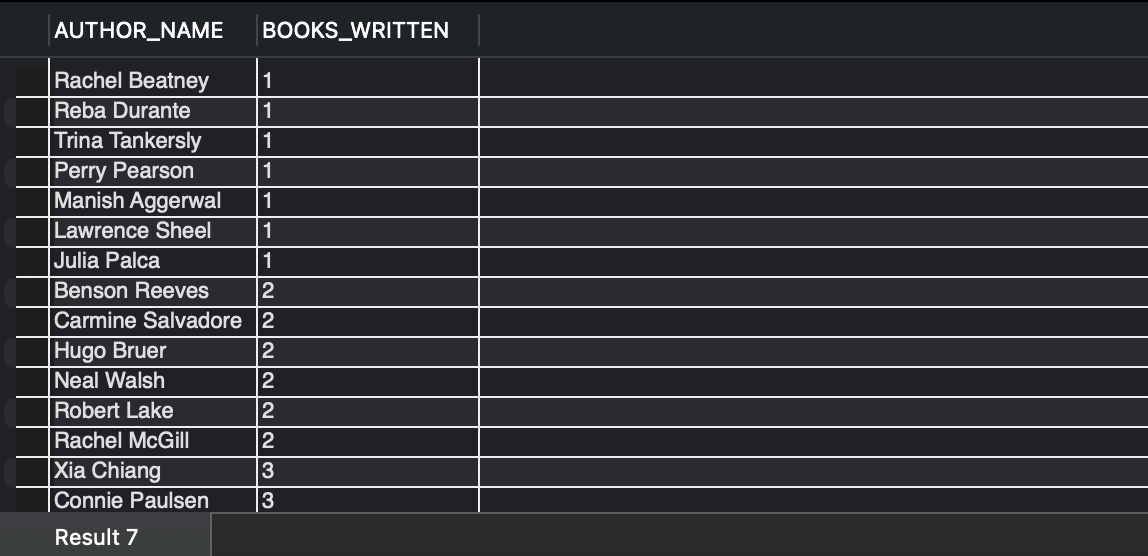
COUNT(WRITES.BOOK\_NUM) AS BOOKS\_WRITTEN

FROM AUTHOR

LEFT JOIN WRITES ON AUTHOR.AU\_ID = WRITES.AU\_ID

GROUP BY AUTHOR\_NAME

ORDER BY BOOKS\_WRITTEN;



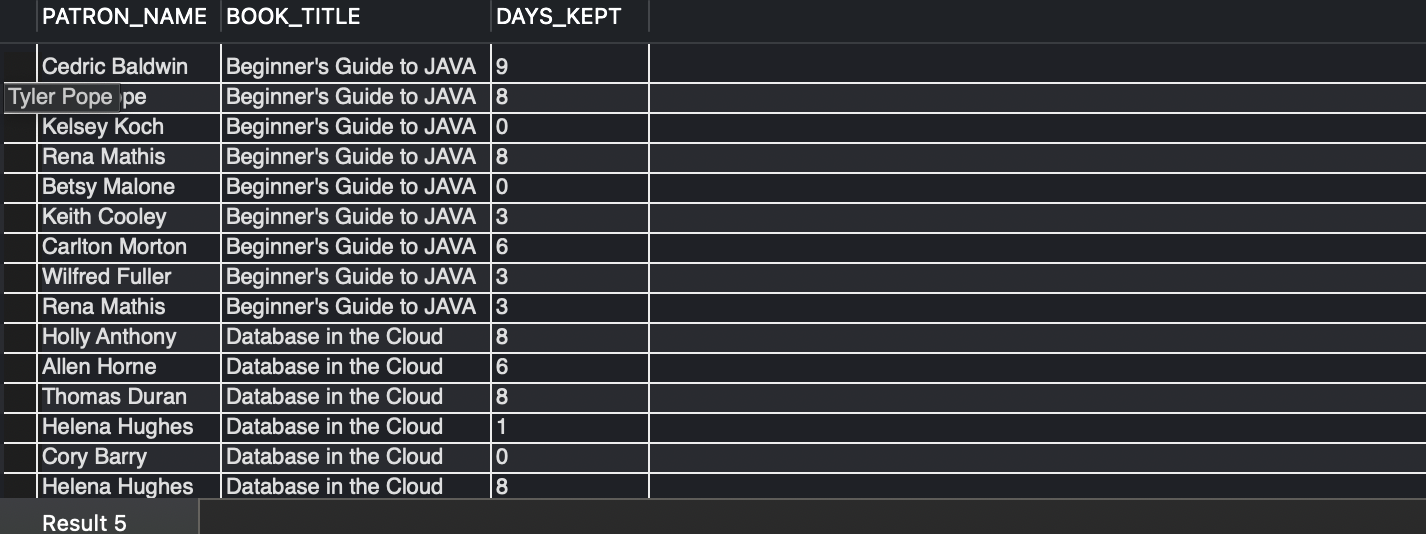
7) Figure out how long each patron kept their checkouts (hint, you will need to calculate this based on book returned date and book check out date). Display each patron name, book title and how many days they kept the book.

SELECT CONCAT(PATRON.PAT\_FNAME, ' ',PATRON.PAT\_LNAME) AS PATRON\_NAME, BOOK.BOOK\_TITLE,

DATEDIFF(CHECKOUT.CHECK\_IN\_DATE, CHECKOUT.CHECK\_OUT\_DATE) AS DAYS\_KEPT

FROM PATRON

JOIN CHECKOUT ON PATRON.PAT\_ID = CHECKOUT.PAT\_ID

JOIN BOOK ON CHECKOUT.BOOK\_NUM = BOOK.BOOK\_NUM;

8) Display each author name, book title and book subject. Sort by Book Subject.

SELECT CONCAT(AUTHOR.AU\_FNAME, ' ', AUTHOR.AU\_LNAME) AS AUTHOR\_NAME,

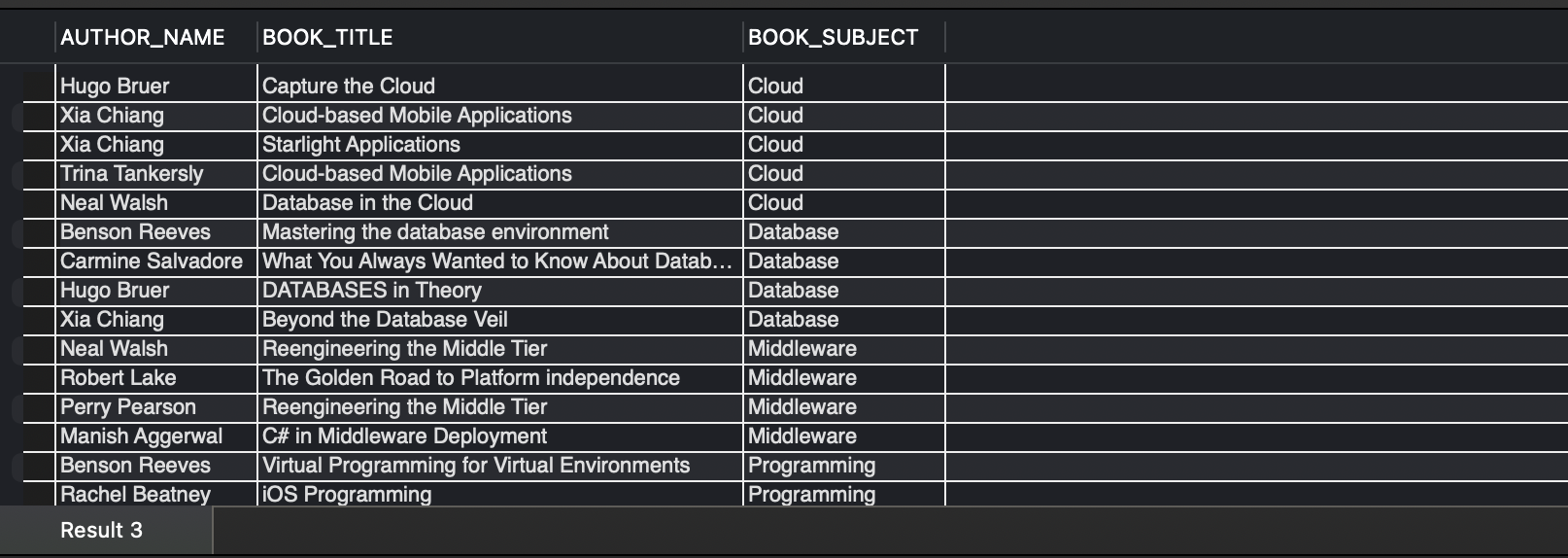
BOOK\_TITLE, BOOK\_SUBJECT

FROM AUTHOR

JOIN WRITES ON AUTHOR.AU\_ID = WRITES.AU\_ID

JOIN BOOK ON WRITES.BOOK\_NUM = BOOK.BOOK\_NUM

ORDER BY BOOK\_SUBJECT;



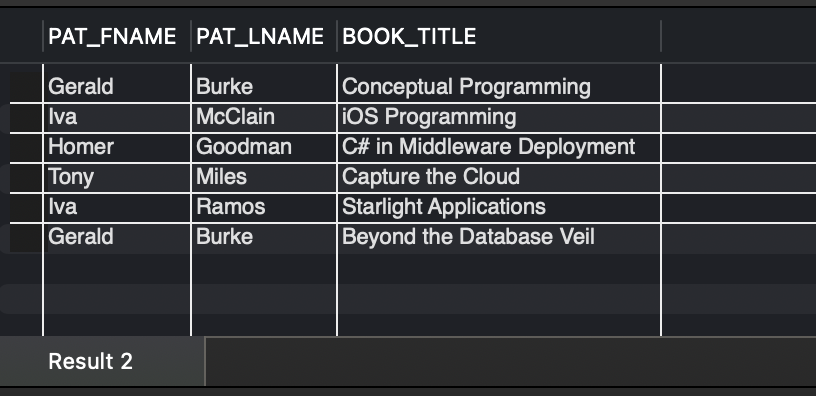
9) Find out who has books currently checked out. You should return the patron's first name, last name, and book title.

SELECT PATRON.PAT\_FNAME,PATRON.PAT\_LNAME, BOOK.BOOK\_TITLE

FROM PATRON

JOIN CHECKOUT ON PATRON.PAT\_ID = CHECKOUT.PAT\_ID

JOIN BOOK ON CHECKOUT.BOOK\_NUM = BOOK.BOOK\_NUM

WHERE CHECKOUT.CHECK\_IN\_DATE IS NULL;

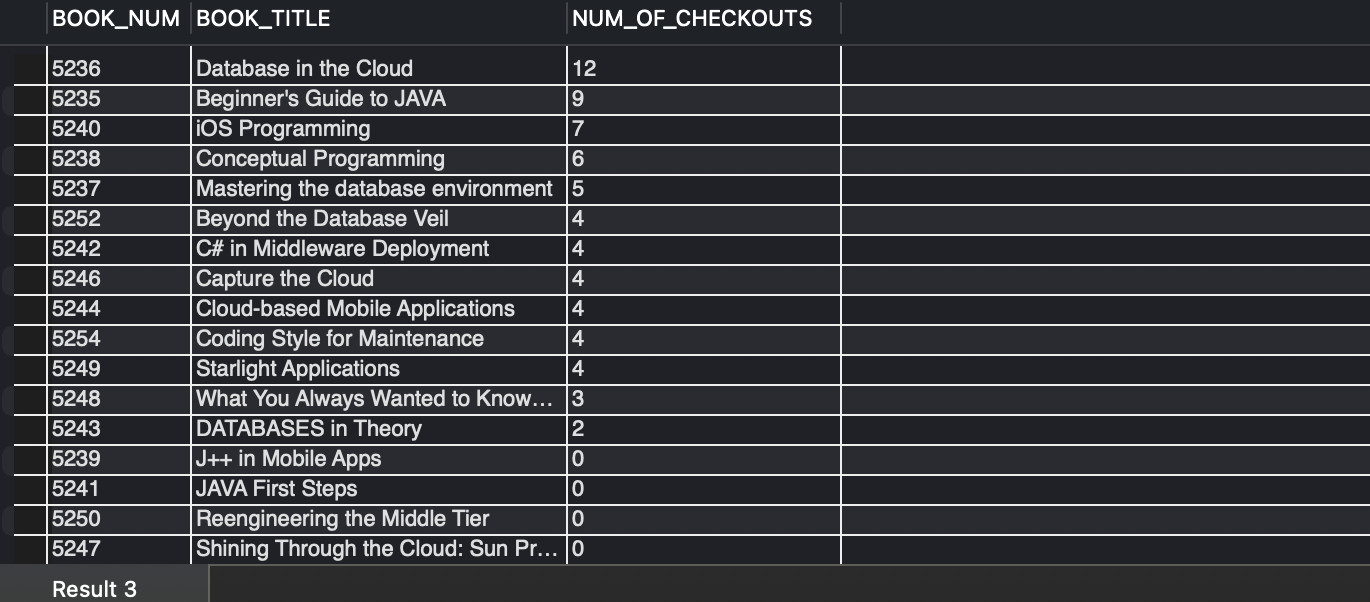
10) Which books are most popular? Create a query that displays the book number, the book title, and the number of times each book has been checked out. Arrange the books in order from the most checkouts to the fewest checkouts. For books with the same number of checkouts, arrange alphabetically.

SELECT BOOK.BOOK\_NUM, BOOK.BOOK\_TITLE, COUNT(CHECKOUT.CHECK\_NUM) AS NUM\_OF\_CHECKOUTS

FROM BOOK

LEFT JOIN CHECKOUT ON BOOK.BOOK\_NUM = CHECKOUT.BOOK\_NUM

GROUP BY BOOK.BOOK\_NUM, BOOK.BOOK\_TITLE

ORDER BY NUM\_OF\_CHECKOUTS desc, BOOK.BOOK\_TITLE;

11) Write a question and a query of your own that joins a minimum of three tables. Think about what information might be useful from this database. Describe the information you want your query to return, write the query and display the results.

-- Kendall's Question

/\* Can you provide a list of all books checked out by students in the "Programming" subject, along with the students' names and the due dates for each book? \*/

SELECT

CONCAT(PATRON.PAT\_FNAME, ' ', PATRON.PAT\_LNAME) AS STUDENT\_NAME,

BOOK.BOOK\_TITLE AS Book\_Title,

CHECKOUT.CHECK\_DUE\_DATE AS Due\_Date

FROM PATRON

JOIN CHECKOUT ON PATRON.PAT\_ID = CHECKOUT.PAT\_ID

JOIN BOOK ON CHECKOUT.BOOK\_NUM = BOOK.BOOK\_NUM

WHERE PATRON.PAT\_TYPE = 'Student' AND BOOK.BOOK\_SUBJECT = 'Programming'

ORDER BY BOOK.BOOK\_TITLE;

