

UPDATED 5/10/2018

Queries and Reports:

\*Blue text indicates which attributes should be projected.

1. List the details of students attending 'UMBC'. - [Student attributes](#)
2. List the details of students from all universities that are graduate students. - [Student attributes](#)
3. List the details of students majoring in "Computer Science" and buying on average more than 2 books. - [Student attributes](#)
4. List the books that have sold the most or that have been rented the most. - [Book title, book PK](#)
5. List by category and subcategories all the books. - [Category, subcategory, book title, book PK](#)
6. List all the book names that are required for a course except books that are of the "Computer Science" category. - [course name, book title](#)
7. List all the books that have been bought by students not associated with a course at a university but have at least 2 keywords in common with books that are associated with a university. - [book title, book PK](#)
8. List all the books and a count of the number of courses each book has been associated with. - [the book title, PK and count of courses](#)
9. List book titles that are related to 'Linear Algebra' - [the book title](#)
10. List books with overall ratings higher than 3. - [the book title](#)
11. Show a list of books, the number of purchases (orders) made, and the overall rating for each book, order by rating (if the book does not rating still include it) - [the book title, count of purchases \(orders\), and overall rating \(aggregate\)](#)
12. List the average number (qty) of books bought by students grouped by book category. - [List the category, the avg number of books](#)
13. List the details of each university, including departments, courses and number of instructors per course . - [university name, department name, course name, count of instructors per course](#)

14. For each university, find the total number of books bought that were associated with that university, include the sum and do not forget that books can be bought by students not attending that university (filter out the students that do not belong to the university).  
the university name, count of books, total sum of book costs
15. List each customer service employee and the total number of tickets they created.- the CS name and PK, count of tickets created
16. List the names of administrators, ordered by salary. - the admin name, and salary, ordered
17. List the names of administrators and the total number of tickets closed. - the admin name, the count of tickets closed
18. List the tickets grouped by their state, the total number created by a student and the total number created by customer support. - state, total number
19. Find the average time it takes for a ticket to go from created to closed. - the avg
20. For each ticket that is closed, show the history of the ticket, ordered by ticket - the ticket title/PK, ticket attributes including state
21. For each student list the books that are recommended based on our definition of a recommendation above. - the student name, recommended book titles
22. For each book , list the total count of students that have purchased (ordered) books with at least one keyword in common with the book (excluding the current book). - the book title, count of students
23. List books by overall ratings and by number of students who rated them -the rating, book titles, number of students who rated each book
24. List the books with a rating of 5 (not averaged across ratings) and the students who rated the books, along with the student's universities - the book title, rating, student name, university name