

Full Stack Development/Software Workshop 2

Formative Exercises 2

Based on lectures: 6

Note

You do not need to solve these queries using subqueries, however if you do choose to do that, that's fine.

These exercises will take you a bit longer than the first set.

Exercise 1

Write a query that lists all of the distinct *custids* of customers who bought albums on the *label* 'RCA'.

Exercise 2

Write a query that lists all of the postcodes of customers who have reviewed an album.

Exercise 3

Write a query that lists all of the postcodes of customers who have bought an album and reviewed an album (any album, not necessarily one they bought).

Think about how many joins you will need for this, and what type.

Exercise 4

Write a query that lists all of the postcodes of customers who have bought an album and reviewed **that** album.

Hint: this is actually easier to write than the previous query.

Exercise 5

Write a query to list the *title*, *year*, *price*, *genre* and *genre description* of albums released after 1970 that have at least one sale. Order the result by year in descending order.

Exercise 6

Write a query that lists the title, year and the sum of the sales (total money spent on the albums) of albums released since 1970. Order by year in descending order.

We have looked at aggregate functions like MAX and AVG. There is another function called SUM that does what you would expect.

Note that you will need a GROUP BY clause. In the GROUP BY you will need to specify title and year.

Exercise 7

Write a query to find the album title and average rating of albums (rounded to 2dp) that have an average rating greater than 3.

Exercise 8

Write a query to find which customer has spent the most money, and how much they have spent. List their *custid* and the amount they have spent.

For this query you can assume that there is only one customer who has spent the most money.

Exercise 9

Write a query to list the names of the top three best-selling artists. Best-selling means have sold the highest number of albums, not have made the most money.

Your result need only contain three artists even if there are multiple artists who have sold the same number of albums.

Exercise 10

”Write a query to find the record label, artist name and highest number of albums sold for that label for an artist who originated in the UK.”

You can again assume this is true of only one artist.