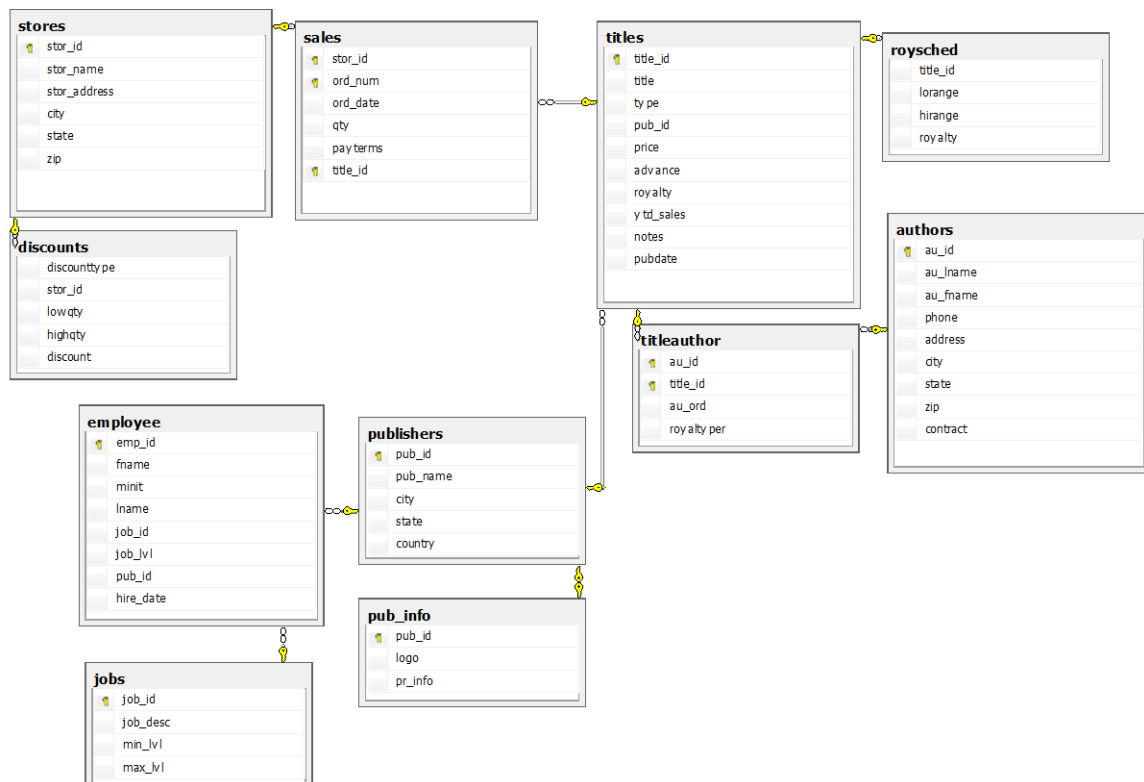


Joins and Subqueries

This is a checkpoint worth 10% Due Thursday 26th April, push your work to GitHub by 5pm.

For the following exercises, please use the database shown below (this is the Microsoft “Pubs” database). Familiarise yourself with the database diagram, then write the indicated queries. Please read the instructions for each group of queries carefully.

You can find the scripts to create and populate the tables on the I: drive.



These queries can be written using joins or subqueries, please make sure you use a mixture of both.

1. List the titles and prices of all books that have the cheapest price.
2. List all titles that have sold more than 40 copies at a single store.
3. List all authors who have not published any books.
4. List all the publishers who have published any business books.
5. List all authors who have published a “popular computing” book (these books have type = 'popular_comp' in the titles table).
6. List all the cities where both an author (or authors) and a publisher (or publishers) are located.
7. List all cities where an author, but no publisher, is located.
8. List all titles that have sold no copies.
9. List the title and total sales of each book whose total sales is less than the **average totals sales** across all books.
10. List the publishers, and the number of books each has published, who are **not** located in California.
11. For each book, list the number of stores where it has been sold.
12. For each book, list its title, the largest quantity of it sold at any one store, and the name of that store.
13. Increase by two points the royalty rate for all books that have sold more than 30 copies **total**.
14. List all types of books published by more than one publisher.

Subqueries and Joins - Expected Output

1.

	title	price
1	You Can Combat Computer Stress!	2.99
2	The Gourmet Microwave	2.99

2.

	title
1	Secrets of Silicon Valley
2	Is Anger the Enemy?

3.

	au_id	au_lname	au_fname
1	341-22-1782	Smith	Meander
2	527-72-3246	Greene	Momingstar
3	724-08-9931	Stringer	Dirk
4	893-72-1158	McBadden	Heather

4.

	pub_name
1	New Moon Books
2	Algodata Infosystems

5.

	au_lname	au_fname
1	Carson	Cheryl
2	Dull	Ann
3	Locksley	Charlene
4	Hunter	Sheryl

6.

	city
1	Berkeley

7.

	city
1	Ann Arbor
2	Corvallis
3	Covelo
4	Gary
5	Lawrence
6	Menlo Park
7	Nashville
8	Oakland
9	Palo Alto
10	Rockville
11	Salt Lake City
12	San Francisco
13	San Jose
14	Vacaville
15	Walnut Creek

8.

	title
1	The Psychology of Computer Cooking
2	Net Etiquette

9.

	title	(No column name)
1	Computer Phobic AND Non-Phobic Individuals: Beha...	20
2	Cooking with Computers: Surreptitious Balance Sheets	25
3	Emotional Security: A New Algorithm	25
4	Fifty Years in Buckingham Palace Kitchens	20
5	Life Without Fear	25
6	Prolonged Data Deprivation: Four Case Studies	15
7	Silicon Valley Gastronomic Treats	10
8	Straight Talk About Computers	15
9	Sushi, Anyone?	20
10	The Busy Executive's Database Guide	15

10.

	pub_name	(No column name)
1	Binnet & Hardley	7
2	New Moon Books	5

	title	(No column name)
1	But Is It User Friendly?	1
2	Computer Phobic AND Non-Phobic Individuals: Beha...	1
3	Cooking with Computers: Surreptitious Balance Sheets	1
4	Emotional Security: A New Algorithm	1
5	Fifty Years in Buckingham Palace Kitchens	1
6	Is Anger the Enemy?	4
7	Life Without Fear	1
8	Onions, Leeks, and Garlic: Cooking Secrets of the M...	1
9	Prolonged Data Deprivation: Four Case Studies	1
10	Secrets of Silicon Valley	1
11	Silicon Valley Gastronomic Treats	1
12	Straight Talk About Computers	1
13	Sushi, Anyone?	1
14	The Busy Executive's Database Guide	2
15	The Gourmet Microwave	2
16	You Can Combat Computer Stress!	1

11.

	title	stor_name	(No column name)
1	But Is It User Friendly?	Bookbeat	30
2	Computer Phobic AND Non-Phobic Individuals: Beha...	Doc-U-Mat: Quality Laundry and Books	20
3	Cooking with Computers: Surreptitious Balance Sheets	Bookbeat	25
4	Emotional Security: A New Algorithm	Doc-U-Mat: Quality Laundry and Books	25
5	Fifty Years in Buckingham Palace Kitchens	News & Brews	20
6	Is Anger the Enemy?	Bamum's	75
7	Is Anger the Enemy?	Doc-U-Mat: Quality Laundry and Books	20
8	Is Anger the Enemy?	Eric the Read Books	3
9	Is Anger the Enemy?	News & Brews	10
10	Life Without Fear	Doc-U-Mat: Quality Laundry and Books	25
11	Onions, Leeks, and Garlic: Cooking Secrets of the M...	News & Brews	40
12	Prolonged Data Deprivation: Four Case Studies	Doc-U-Mat: Quality Laundry and Books	15
13	Secrets of Silicon Valley	Bamum's	50
14	Silicon Valley Gastronomic Treats	Fricative Bookshop	10
15	Straight Talk About Computers	Fricative Bookshop	15
16	Sushi, Anyone?	News & Brews	20
17	The Busy Executive's Database Guide	Bookbeat	10
18	The Busy Executive's Database Guide	Eric the Read Books	5
19	The Gourmet Microwave	Bookbeat	15
20	The Gourmet Microwave	Doc-U-Mat: Quality Laundry and Books	25
21	You Can Combat Computer Stress!	Fricative Bookshop	35

12.

13. (32 rows affected)

	type
1	business
2	psychology

14.
