

## SQL Worksheet 2020

Disclaimer! If you have a result that is vastly different from mine don't assume mine is right and yours is wrong! Come and have a chat (I wrote these in a very quick time frame).

Expected query results

1.

title	genre
To Kill a Mocking Bird	Classic

2.

published	1
1950	
1960	
1979	

3.

name	title
Sarah Martinez	To Kill a Mocking Bird
Sarah Martinez	To Kill a Mocking Bird
Mike Anderson	To Kill a Mocking Bird

4.

name
-----
Daniel Lewis
Chris Jackson

5.

name	title	ratings
-----	-----	-----
Isaac Asimov	I Robot	5

6.

reviewer name	Book title	ratings	ratingDate
-----	-----	-----	-----
Ashley White	The Diary of a Young Girl	3	2011-01-02
Brittany Harris	Dune	2	2011-01-20
Brittany Harris	I Robot	2	2011-01-30
Brittany Harris	I Robot	4	2011-01-12
Chris Jackson	Dune	3	2011-01-27
Chris Jackson	I Robot	4	NULL
Chris Jackson	The Diary of a Young Girl	2	2011-01-22
Daniel Lewis	The Neverending Story	4	NULL
Elizabeth Thomas	1776	3	2011-01-15
Elizabeth Thomas	The Neverending Story	5	2011-01-19
Isaac Asimov	I Robot	5	2011-01-20
Mike Anderson	To Kill a Mocking Bird	3	2011-01-09
Sarah Martinez	To Kill a Mocking Bird	2	2011-01-22
Sarah Martinez	To Kill a Mocking Bird	4	2011-01-27

7.

name	title
Sarah Martinez	To Kill a Mocking Bird

8.

title	max(ratings)
1776	3
Dune	3
I Robot	5
The Diary of a Young	3
The Neverending Stor	5
To Kill a Mocking Bi	4

9.

title	ratingSpread
I Robot	3
To Kill a Mocking Bird	2
Dune	1
The Diary of a Young Girl	1
The Neverending Story	1
1776	0

10.

avg difference
-0.8125

Tricky! You need to get the average rating of each Book made before 1970. Likewise for those after. I did this by creating two tables in the FROM clause one before 1970 and one after. This would have created a Cartesian product at that point - which I wasn't interested in. I was simply using the FROM to create tables that I could then average. There might be a simpler way.

### Modification

11. Add the reviewer John Green to your database, with an rID of 209.

12. Insert 5-star ratings by Daniel Lewis for all books in the database. Leave the review date as NULL. Do Not write five insert statements.

202	101	5	null
202	102	5	null
202	103	5	null
202	104	5	null
202	105	5	null
202	106	5	null
202	107	5	null
202	108	5	null

13. For all books that have an average rating of 4 or higher, add 25 to the published year.  
(Update the existing Rows; don't insert new Rows.)

Before:

101	To Kill a Mocking Bi	1960
102	Animal Farm	1945
103	Dune	1965
104	The Diary of a Young	1947
105	The Princess Bride	1973
106	The Neverending Stor	1979
107	1776	2005
108	I Robot	1950

After:

101	To Kill a Mocking Bi	1960
102	Animal Farm	1970
103	Dune	1965
104	The Diary of a Young	1947
105	The Princess Bride	1998
106	The Neverending Stor	2004
107	1776	2030
108	I Robot	1950

14. Remove all ratings where the book year is before 1970 or after 2000, and the rating is fewer than 4.

After UPDATE is run:

rID	bID	ratings	ratingDate
201	101	2	2011-01-22
201	101	4	2011-01-27
202	106	4	null
205	103	3	2011-01-27
205	104	2	2011-01-22
205	108	4	null
206	107	3	2011-01-15
206	106	5	2011-01-19
207	107	5	2011-01-20
202	101	5	null
202	102	5	null
202	103	5	null
202	104	5	null
202	105	5	null
202	106	5	null
202	107	5	null
202	108	5	null