SQL Worksheet 2021

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

sqlite>

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. before modifications

```
-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:

bID	title	published
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	1975

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:

Data before delete:

title	published	ratings
To Kill a Mocking Bi	1960	2
To Kill a Mocking Bi	1960	4
The Neverending Stor	2004	4
Dune	1965	2
I Robot	1975	4
I Robot	1975	2
To Kill a Mocking Bi	1960	3
Dune	1965	3
The Diary of a Young	1947	2
I Robot	1975	4
1776	2030	3
The Neverending Stor	2004	5
I Robot	1975	5
The Diary of a Young	1947	3
To Kill a Mocking Bi	1960	5
Animal Farm	1970	5
Dune	1965	5
The Diary of a Young	1947	5
The Princess Bride	1998	5
The Neverending Stor	2004	5
1776	2030	5
I Robot	1975	5
sqlite>		

Identified data for deletion:

title	published	ratings
To Kill a Mocking Bi	1960	2
Dune	1965	2
To Kill a Mocking Bi	1960	3
Dune	1965	3
The Diary of a Young	1947	2
1776	2030	3
The Diary of a Young	1947	3

After Delete

```
sqlite>  SELECT title, published, ratings FROM Rating AS R JOIN Book AS B ON B.bID = R.bID;
title                published            ratings
-------------------  -------------------  -------------------
To Kill a Mocking Bi 1960                 4
The Neverending Stor 2004                 4
I Robot              1975                 4
I Robot              1975                 2
I Robot              1975                 4
The Neverending Stor 2004                 5
I Robot              1975                 5
To Kill a Mocking Bi 1960                 5
Animal Farm          1970                 5
Dune                 1965                 5
The Diary of a Young 1947                 5
The Princess Bride   1998                 5
The Neverending Stor 2004                 5
1776                 2030                 5
I Robot              1975                 5
sqlite>
```