

SQL TASK PRACTICE - 6

mysql>

mysql> CREATE TABLE library (

-> book_id INT,

-> title VARCHAR(255),

-> author VARCHAR(255),

-> genre VARCHAR(100),

-> price DECIMAL(10,2),

-> published_year INT,

-> copies INT

->);

Query OK, 0 rows affected (0.02 sec)

mysql> INSERT INTO library VALUES (1, 'Becoming', 'Michelle Obama', 'Biography', 19.99, 2018, 10);

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO library VALUES (2, 'Atomic Habits', 'James Clear', 'Self-help', 16.99, 2018, 15);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO library VALUES (3, 'The Power of Habit', 'Charles Duhigg', 'Self-help', 17.99, 2012, 12);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO library VALUES (4, '1984', 'George Orwell', 'Dystopian', 14.99, 1949, 8);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO library VALUES (5, 'Educated', 'Tara Westover', 'Memoir', 19.99, 2018, 9);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO library VALUES (6, 'Sapiens', 'Yuval Noah Harari', 'History', 21.50, 2011, 5);

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO library VALUES (7, 'Homo Deus', 'Yuval Noah Harari', 'History', 21.50, 2016, 6);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO library VALUES (8, 'The Alchemist', 'Paulo Coelho', 'Fiction', 12.99, 1988, 11);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO library VALUES (9, 'Deep Work', 'Cal Newport', 'Self-help', 16.99, 2016, 7);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO library VALUES (10, 'The Road', 'Cormac McCarthy', 'Fiction', 14.99, 2006, 4);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> -- 1. Book(s) with the highest price
```

```
mysql> SELECT * FROM library
```

```
-> WHERE price = (SELECT MAX(price) FROM library);
```

```
+-----+-----+-----+-----+-----+-----+-----+
| book_id | title   | author      | genre  | price | published_year | copies |
+-----+-----+-----+-----+-----+-----+-----+
| 6 | Sapiens | Yuval Noah Harari | History | 21.50 | 2011 | 5 |
| 7 | Homo Deus | Yuval Noah Harari | History | 21.50 | 2016 | 6 |
+-----+-----+-----+-----+-----+-----+-----+
```

```
2 rows in set (0.00 sec)
```

```
mysql>
```

```
mysql> -- 2. Books published before the average publish year
```

```
mysql> SELECT * FROM library
```

```
-> WHERE published_year < (SELECT AVG(published_year) FROM library);
```

```
+-----+-----+-----+-----+-----+-----+-----+
| book_id | title   | author      | genre  | price | published_year | copies |
+-----+-----+-----+-----+-----+-----+-----+
| 4 | 1984    | George Orwell | Dystopian | 14.99 | 1949 | 8 |
+-----+-----+-----+-----+-----+-----+-----+
```

```
| 8 | The Alchemist | Paulo Coelho | Fiction | 12.99 | 1988 | 11 |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

2 rows in set (0.00 sec)

mysql>

mysql> -- 3. Books with more copies than 'Becoming'

mysql> SELECT * FROM library

-> WHERE copies > (

-> SELECT copies FROM library WHERE title = 'Becoming'

->);

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| book_id | title          | author      | genre  | price | published_year | copies |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| 2 | Atomic Habits | James Clear | Self-help | 16.99 | 2018 | 15 |
```

```
| 3 | The Power of Habit | Charles Duhigg | Self-help | 17.99 | 2012 | 12 |
```

```
| 8 | The Alchemist | Paulo Coelho | Fiction | 12.99 | 1988 | 11 |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

mysql>

mysql> -- 4. Books in the same genre as 'Atomic Habits'

mysql> SELECT * FROM library

-> WHERE genre = (

-> SELECT genre FROM library WHERE title = 'Atomic Habits'

->);

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| book_id | title          | author      | genre  | price | published_year | copies |
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

```
| 2 | Atomic Habits | James Clear | Self-help | 16.99 | 2018 | 15 |
```

```
| 3 | The Power of Habit | Charles Duhigg | Self-help | 17.99 | 2012 | 12 |
```

```
| 9 | Deep Work | Cal Newport | Self-help | 16.99 | 2016 | 7 |
```

```
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

mysql>

mysql> -- 5. Books with fewer copies than any book in 'Self-help'

mysql> SELECT * FROM library

-> WHERE copies < (

-> SELECT MIN(copies) FROM library WHERE genre = 'Self-help'

->);

```
+-----+-----+-----+-----+-----+-----+
| book_id | title   | author      | genre | price | published_year | copies |
+-----+-----+-----+-----+-----+-----+
| 6 | Sapiens | Yuval Noah Harari | History | 21.50 | 2011 | 5 |
| 7 | Homo Deus | Yuval Noah Harari | History | 21.50 | 2016 | 6 |
| 10 | The Road | Cormac McCarthy | Fiction | 14.99 | 2006 | 4 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

mysql>

mysql> -- 6. Books with duplicate prices

mysql> SELECT * FROM library

-> WHERE price IN (

-> SELECT price FROM library

-> GROUP BY price

-> HAVING COUNT(*) > 1

->);

```
+-----+-----+-----+-----+-----+-----+
| book_id | title   | author      | genre | price | published_year | copies |
+-----+-----+-----+-----+-----+-----+
| 1 | Becoming | Michelle Obama | Biography | 19.99 | 2018 | 10 |
| 2 | Atomic Habits | James Clear | Self-help | 16.99 | 2018 | 15 |
```

	4		1984		George Orwell		Dystopian		14.99		1949		8	
	5		Educated		Tara Westover		Memoir		19.99		2018		9	
	6		Sapiens		Yuval Noah Harari		History		21.50		2011		5	
	7		Homo Deus		Yuval Noah Harari		History		21.50		2016		6	
	9		Deep Work		Cal Newport		Self-help		16.99		2016		7	
	10		The Road		Cormac McCarthy		Fiction		14.99		2006		4	

```
+-----+-----+-----+-----+-----+-----+-----+
```

8 rows in set (0.00 sec)

mysql>

mysql> -- 7. Book(s) with the oldest published year

mysql> SELECT * FROM library

-> WHERE published_year = (

-> SELECT MIN(published_year) FROM library

->);

```
+-----+-----+-----+-----+-----+-----+-----+
```

	book_id		title		author		genre		price		published_year		copies	
--	---------	--	-------	--	--------	--	-------	--	-------	--	----------------	--	--------	--

```
+-----+-----+-----+-----+-----+-----+-----+
```

	4		1984		George Orwell		Dystopian		14.99		1949		8	
--	---	--	------	--	---------------	--	-----------	--	-------	--	------	--	---	--

```
+-----+-----+-----+-----+-----+-----+-----+
```

1 row in set (0.00 sec)

mysql>

mysql> -- 8. Books by authors with more than one book

mysql> SELECT * FROM library

-> WHERE author IN (

-> SELECT author FROM library

-> GROUP BY author

-> HAVING COUNT(*) > 1

->);

```
+-----+-----+-----+-----+-----+-----+-----+
```

book_id	title	author	genre	price	published_year	copies
6	Sapiens	Yuval Noah Harari	History	21.50	2011	5
7	Homo Deus	Yuval Noah Harari	History	21.50	2016	6

2 rows in set (0.00 sec)

mysql>

mysql> -- 9. Books with price greater than average

mysql> SELECT * FROM library

-> WHERE price > (

-> SELECT AVG(price) FROM library

->);

book_id	title	author	genre	price	published_year	copies
1	Becoming	Michelle Obama	Biography	19.99	2018	10
3	The Power of Habit	Charles Duhigg	Self-help	17.99	2012	12
5	Educated	Tara Westover	Memoir	19.99	2018	9
6	Sapiens	Yuval Noah Harari	History	21.50	2011	5
7	Homo Deus	Yuval Noah Harari	History	21.50	2016	6

5 rows in set (0.00 sec)

mysql>

mysql> -- 10. Books published the same year as 'The Power of Habit'

mysql> SELECT * FROM library

-> WHERE published_year = (

-> SELECT published_year FROM library WHERE title = 'The Power of Habit'

->);

book_id	title	author	genre	price	published_year	copies
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book_id	title	author	genre	price	published_year	copies
3	The Power of Habit	Charles Duhigg	Self-help	17.99	2012	12

1 row in set (0.00 sec)

mysql>