

Lesson 11- the power of logical operators

- 1- Not equal
- 2- Not like
- 3- Greater than
- 4- Less than
- 5- Logical And
- 6- Logical OR
- 7- Between
- 8- In and not in
- 9- Case statement
- 10- Logical operators exercise
- 11- Logical operator exercise solution

Logical operators

Not equal

```
mysql>
mysql> SELECT title, released_year FROM books WHERE released_year = 2017;
+-----+-----+
| title           | released_year |
+-----+-----+
| Lincoln In The Bardo | 2017         |
+-----+-----+
1 row in set (0.00 sec)
```

"Select all birthdays
between 1990 and
1992"

"Select all items that
are in stock AND
priced below \$19.99"



Not Equal

```
mysql>
mysql> SELECT title, released_year FROM books WHERE released_year = 2017;
+-----+-----+
| title           | released_year |
+-----+-----+
| Lincoln In The Bardo | 2017         |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

```
SELECT title FROM books
WHERE year != 2017;
```

Select books that were not released in 2017

```
1 row in set (0.00 sec)

mysql> SELECT title, released_year FROM books WHERE released_year != 2017;
+-----+-----+
| title           | released_year |
+-----+-----+
| The Namesake     | 2003         |
| Norse Mythology  | 2016         |
| American Gods    | 2001         |
| Interpreter of Maladies | 1996         |
| A Hologram for the King: A Novel | 2012         |
| The Circle       | 2013         |
| The Amazing Adventures of Kavalier & Clay | 2000         |
+-----+-----+
```

18 rows in set (0.00 sec)

```
mysql> SELECT title, author_lname FROM books;
```

```
mysql> SELECT title, author_lname FROM books WHERE author_lname = 'Harris';
+-----+-----+
| title           | author_lname |
+-----+-----+
| 10% Happier     | Harris       |
| fake_book       | Harris       |
+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT title, author_lname FROM books WHERE author_lname != 'Harris';
+-----+-----+
| title           | author_lname |
+-----+-----+
| The Namesake     | Lahiri       |
| Norse Mythology  | Gaiman       |
| American Gods    | Gaiman       |
| Interpreter of Maladies | Lahiri       |
+-----+-----+
```

Not like

NOT LIKE

```
Empty set (0.00 sec)

mysql> SELECT title FROM books WHERE title LIKE 'W%';
+-----+
| title           |
+-----+
| What We Talk About When We Talk About Love: Stories |
| Where I'm Calling From: Selected Stories             |
| White Noise     |
+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT title FROM books WHERE title LIKE '%W%';
```

title
A Heartbreaking Work of Staggering Genius
What We Talk About When We Talk About Love: Stories
Where I'm Calling From: Selected Stories
White Noise
Cannery Row

5 rows in set (0.00 sec)

```
SELECT title FROM books
WHERE title NOT LIKE 'W%';
```

Select books with titles that don't start with 'W'

```
mysql> SELECT title FROM books WHERE title LIKE 'W%';
```

title
What We Talk About When We Talk About Love: Stories
Where I'm Calling From: Selected Stories
White Noise

3 rows in set (0.00 sec)

```
mysql> SELECT title FROM books WHERE title NOT LIKE 'W%';
```

title
The Namesake
Norse Mythology
American Gods

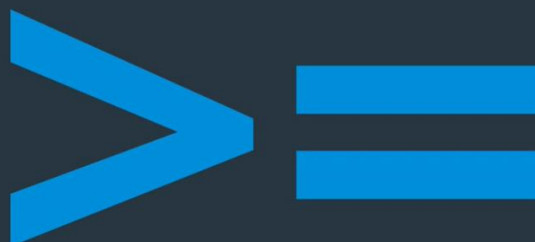
Greater than

```
SELECT * FROM books
WHERE released_year > 2000;
```

Select books released after the year 2000

```
mysql> SELECT title, released_year FROM books ORDER BY released_year;
```

title	released_year
Cannery Row	1945
What We Talk About When We Talk About Love: Stories	1981
White Noise	1985
Where I'm Calling From: Selected Stories	1989



Greater Than
Or Equal To

```
13 rows in set (0.00 sec)

mysql> SELECT title, released_year FROM books WHERE released_year >= 2000 ORDER BY released_year
```

```
mysql> SELECT title, stock_quantity FROM books;

+-----+-----+
| title                                     | stock_quantity |
+-----+-----+
| The Namesake                             | 32             |
| Norse Mythology                           | 43             |
| American Gods                             | 12             |
| Interpreter of Maladies                   | 97             |
| A Hologram for the King: A Novel           | 154            |
| The Circle                               | 26             |
| The Amazing Adventures of Kavalier & Clay | 68             |
+-----+-----+
```

```
mysql> SELECT title, stock_quantity FROM books WHERE stock_quantity >= 100;

+-----+-----+
| title                                     | stock_quantity |
+-----+-----+
| A Hologram for the King: A Novel           | 154            |
| A Heartbreaking Work of Staggering Genius | 104            |
| Coraline                                  | 100            |
| Oblivion: Stories                         | 172            |
| fake_book                                 | 287            |
| Lincoln In The Bardo                      | 1000           |
+-----+-----+

6 rows in set (0.00 sec)
```

A Small Side Note

SELECT 99 > 1;

What Do You Expect?

```
mysql> SELECT 99 > 1;

+-----+
| 99 > 1 |
+-----+
| 1      |
+-----+

1 row in set (0.00 sec)
```

```
mysql> SELECT 99 > 567;

+-----+
| 99 > 567 |
+-----+
| 0        |
+-----+

1 row in set (0.00 sec)
```

Commands

Navigation

Workspace

▼ Dates and Times

▼ Logical Operators

▼ refining_selections

1 100 > 5

2 -15 > 15

3 9 > -10

4 1 > 1

5 'a' > 'b'

6 'A' > 'a'

7

Source

Outline

Debugger



Less Than

```
SELECT * FROM books
WHERE released_year < 2000;
```

Select books released **before** the year 2000

```
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT title, released_year FROM books;
```

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

```
mysql> SELECT title, released_year FROM books ORDER BY released_year;
```

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

```
mysql> SELECT title, released_year FROM books WHERE released_year < 2000 ORDER BY released_year;
```



Less Than Or
Equal To

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

```
mysql> SELECT title, released_year FROM books WHERE released_year <= 2000 ORDER BY released_year;
```

Logical and



LOGICAL AND

```
31 1 < 5 && 7 = 9
```

SELECT books written
by Dave Eggers,
published after the
year 2010

```
SELECT * FROM books  
WHERE author_lname='Eggers';
```

```
SELECT * FROM books  
WHERE released_year > 2010;
```

AND

```
SELECT * FROM books  
WHERE released_year > 2010;
```



```
SELECT * FROM books  
WHERE author_lname='Eggers' AND  
released_year > 2010;
```

like.sql
problems.sql

```
mysql>  
mysql> SELECT title, author_lname, released_year FROM books  
-> WHERE author_lname = 'Eggers';
```

title	author_lname	released_year
A Hologram for the King: A Novel	Eggers	2012
The Circle	Eggers	2013
A Heartbreaking Work of Staggering Genius	Eggers	2001

3 rows in set (0.00 sec)

problems.sql

```
mysql>  
mysql> SELECT title, author_lname, released_year FROM books  
-> WHERE author_lname = 'Eggers' AND released_year > 2010;
```

title	author_lname	released_year
A Hologram for the King: A Novel	Eggers	2012
The Circle	Eggers	2013

2 rows in set (0.00 sec)

Corr

limit.sql
order_by.sql
testing

```
29  
30 SELECT * FROM products WHERE brand = 'lego' AND instock= 'true';  
31
```

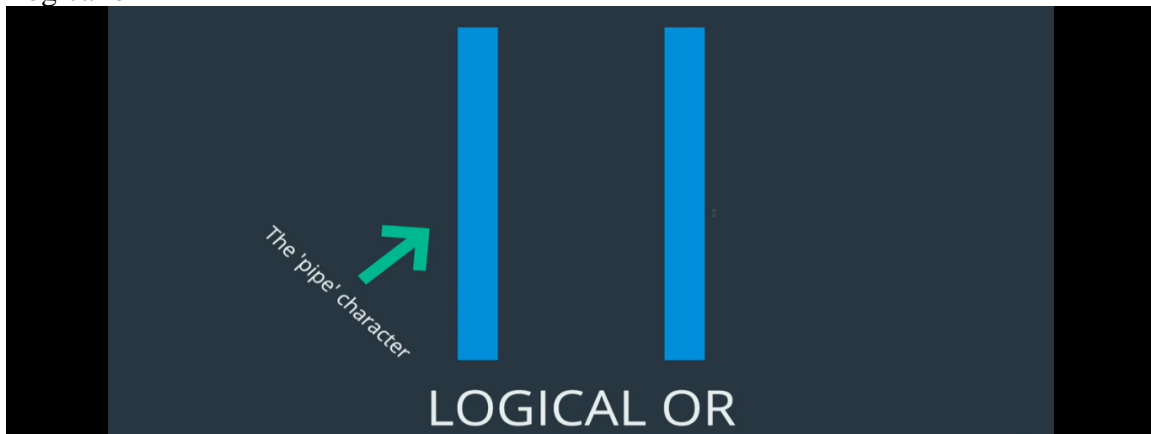
```
SELECT * FROM books  
WHERE author_lname='Eggers' AND  
released_year > 2010 AND  
title LIKE '%novel%';
```

```
mysql> SELECT title, author_lname, released_year FROM books
-> WHERE author_lname = 'Eggers' &&
-> released_year > 2010 AND
-> title LIKE '%novel%';
```

title	author_lname	released_year
A Hologram for the King: A Novel	Eggers	2012

1 row in set (0.00 sec)

Logical or



Let's Try Something!

```
SELECT * FROM books
WHERE author_lname='Eggers' &&
released_year > 2010;
```

↓

```
SELECT * FROM books
WHERE author_lname='Eggers' || ,
released_year > 2010;
```

```
47 SELECT title, author_lname, released_year FROM books
48 WHERE author_lname = 'Eggers' ||
49 released_year > 2010;
```

title	author_lname	released_year
Norse Mythology	Gaiman	2016
A Hologram for the King: A Novel	Eggers	2012
The Circle	Eggers	2013
A Heartbreaking Work of Staggering Genius	Eggers	2001
10% Happier	Harris	2014
Lincoln In The Bardo	Saunders	2017

Condition 1 && Condition 2

BOTH SIDES MUST BE TRUE

Condition 1 || Condition 2

ONLY ONE SIDE MUST BE TRUE

```
50
51 40 <= 100 || -2 > 0
52 10 > 5 || 5 = 5
53 'a' = 5 || 3000 > 2000
54
55
```

```
mysql> SELECT title, author_lname, released_year, stock_quantity FROM books
mysql> -> WHERE author_lname = 'Eggers' ||
-> released_year > 2010 OR
-> stock_quantity > 100
->
```

A Hologram for the King: A Novel	Eggers	2012	154
The Circle	Eggers	2013	26
A Heartbreaking Work of Staggering Genius	Eggers	2001	104
Oblivion: Stories	Foster Wallace	2004	172
10% Happier	Harris	2014	29
fake_book	Harris	2001	287

Between

How can we
accomplish the same
thing using what we
already know?

Select all books
published between
2004 and 2015

USE LOGICAL AND!

```
SELECT title, released_year FROM
books WHERE released_year >= 2004 &&
released_year <= 2015;
```

Command	SELECT title, released_year FROM books;
---------	---


```

63
64
65 SELECT title, released_year FROM
66 books WHERE released_year >= 2004 &&
67 released_year <= 2015;
68
69

```

```

mysql> SELECT title, released_year FROM
-> books WHERE released_year >= 2004 &&
-> released_year <= 2015;
+-----+-----+
| title                               | released_year |
+-----+-----+
| A Hologram for the King: A Novel    | 2012          |
| The Circle                          | 2013          |
| Just Kids                          | 2010          |
| Oblivion: Stories                   | 2004          |
| Consider the Lobster                | 2005          |
| 10% Happier                        | 2014          |
+-----+-----+
6 rows in set (0.01 sec)

```

BETWEEN x AND y

```
SELECT title, released_year FROM books
WHERE released_year BETWEEN 2004 AND 2015;
```

```

mysql> SELECT title, released_year FROM books
-> WHERE released_year BETWEEN 2004 AND 2015;
+-----+-----+
| title                               | released_year |
+-----+-----+
| A Hologram for the King: A Novel    | 2012          |
| The Circle                          | 2013          |
| Just Kids                          | 2010          |
| Oblivion: Stories                   | 2004          |
| Consider the Lobster                | 2005          |
| 10% Happier                        | 2014          |
+-----+-----+
6 rows in set (0.01 sec)

```

NOT BETWEEN

NOT BETWEEN x AND y

```
SELECT title, released_year FROM books
WHERE released_year NOT BETWEEN 2004 AND 2015;
```

```

71
72 SELECT title, released_year FROM books
73 WHERE released_year NOT BETWEEN 2004 AND 2015;

```

Cast

```

mysql> SELECT CAST('2017-05-02' AS DATETIME);
+-----+
| CAST('2017-05-02' AS DATETIME) |
+-----+
| 2017-05-02 00:00:00             |
+-----+
1 row in set (0.00 sec)

```

Database changed
mysql> SELECT * FROM people;

name	birthdate	birthtime	birthdt
Padma	1983-11-11	10:07:35	1983-11-11 10:07:35
Larry	1943-12-25	04:10:42	1943-12-25 04:10:42
Toaster	2017-04-21	19:12:43	2017-04-21 19:12:43

3 rows in set (0.00 sec)

```

74
75 SELECT name, birthdt FROM people
76 WHERE birthdt BETWEEN '1980-01-01' AND '2000-01-01';
77

```

77:1 Text Spaces: 4

```

75 SELECT name, birthdt FROM people
76 WHERE birthdt BETWEEN CAST('1980-01-01' AS DATETIME)
77 AND CAST('2000-01-01' AS DATETIME);

```

(137 Bytes) 75:1 Text Spaces: 4

Case study

title	released_year	GENRE
The Namesake	2003	Modern Lit
Norse Mythology	2016	Modern Lit
American Gods	2001	Modern Lit
Interpreter of Maladies	1996	20th Century Lit
A Hologram for the King: A Novel	2012	Modern Lit
The Circle	2013	Modern Lit
The Amazing Adventures of Kavalier & Clay	2000	Modern Lit
Just Kids	2010	Modern Lit
A Heartbreaking Work of Staggering Genius	2001	Modern Lit
Coraline	2003	Modern Lit
What We Talk About When We Talk About Love: Stories	1981	20th Century Lit
Where I'm Calling From: Selected Stories	1989	20th Century Lit
White Noise	1985	20th Century Lit
Cannery Row	1945	20th Century Lit
Oblivion: Stories	2004	Modern Lit
Consider the Lobster	2005	Modern Lit
10% Happier	2014	Modern Lit
fake_book	2001	Modern Lit
Lincoln In The Bardo	2017	Modern Lit

```

SELECT title, released_year,
       CASE
         WHEN released_year >= 2000 THEN 'Modern Lit'
         ELSE '20th Century Lit'
       END AS GENRE
FROM books;

```

```

120 SELECT title, released_year,
121        CASE
122          WHEN released_year >= 2000 THEN 'Modern Lit'
123          ELSE '20th Century Lit'
124        END AS GENRE
125 FROM books;
126

```

126:16 Text Spaces: 4

title	released_year	GENRE
The Namesake	2003	Modern Lit
Norse Mythology	2016	Modern Lit
American Gods	2001	Modern Lit
Interpreter of Maladies	1996	20th Century Lit
A Hologram for the King: A Novel	2012	Modern Lit
The Circle	2013	Modern Lit
The Amazing Adventures of Kavalier & Clay	2000	Modern Lit
Just Kids	2010	Modern Lit
A Heartbreaking Work of Staggering Genius	2001	Modern Lit
Coraline	2003	Modern Lit
What We Talk About When We Talk About Love: Stories	1981	20th Century Lit

title	stock_quantity	STOCK
The Namesake	32	*
Norse Mythology	43	*
American Gods	12	*
Interpreter of Maladies	97	**
A Hologram for the King: A Novel	154	***
The Circle	26	*
The Amazing Adventures of Kavalier & Clay	68	**
Just Kids	55	**
A Heartbreaking Work of Staggering Genius	104	***
Coraline	100	**
What We Talk About When We Talk About Love: Stories	23	*
Where I'm Calling From: Selected Stories	12	*
White Noise	49	*
Cannery Row	95	**
Oblivion: Stories	172	***
Consider the Lobster	92	**
10% Happier	29	*
fake_book	287	***
Lincoln In The Bardo	1000	***

```
SELECT title, stock_quantity,
CASE
  WHEN stock_quantity BETWEEN 0 AND 50 THEN '*'
  WHEN stock_quantity BETWEEN 51 AND 100 THEN '**'
  ELSE '***'
END AS STOCK
FROM books;
```

```
126
127 SELECT title, stock_quantity,
128 CASE
129   WHEN stock_quantity BETWEEN 0 AND 50 THEN '*'
130   WHEN stock_quantity BETWEEN 51 AND 100 THEN '**'
131   ELSE '***'
132 END AS STOCK
133 FROM books;
```

title	stock_quantity	STOCK
The Namesake	32	*
Norse Mythology	43	*
American Gods	12	*
Interpreter of Maladies	97	**
A Hologram for the King: A Novel	154	***
The Circle	26	*
The Amazing Adventures of Kavalier & Clay	68	**
Just Kids	55	**
A Heartbreaking Work of Staggering Genius	104	***
Coraline	100	**
What We Talk About When We Talk About Love: Stories	23	*

```
126
127 SELECT title,
128 CASE
129   WHEN stock_quantity BETWEEN 0 AND 50 THEN '*'
130   WHEN stock_quantity BETWEEN 51 AND 100 THEN '**'
131   ELSE '***'
132 END AS STOCK
133 FROM books;
```

title	STOCK
The Namesake	*
Norse Mythology	*
American Gods	*
Interpreter of Maladies	**
A Hologram for the King: A Novel	***
The Circle	*
The Amazing Adventures of Kavalier & Clay	**
Just Kids	**
A Heartbreaking Work of Staggering Genius	***
Coraline	**
What We Talk About When We Talk About Love: Stories	*
Where I'm Calling From: Selected Stories	*

A Little More Succinct

```
SELECT title, stock_quantity,
CASE
  WHEN stock_quantity <= 50 THEN '*'
  WHEN stock_quantity <= 100 THEN '**'
  ELSE '***'
END AS STOCK
FROM books;
```

```
mysql>
mysql> SELECT title, stock_quantity,
-> CASE
->   WHEN stock_quantity <= 50 THEN '*'
->   WHEN stock_quantity <= 100 THEN '**'
->   ELSE '***'
-> END AS STOCK
-> FROM books;
```

title	stock_quantity	STOCK
The Namesake	32	*
Norse Mythology	43	*
American Gods	12	*
Interpreter of Maladies	97	**

Exercises

Evaluate the following...

```
SELECT 10 != 10;
```

```
SELECT 15 > 14 && 99 - 5 <= 94;
```

```
SELECT 1 IN (5,3) || 9 BETWEEN 8 AND 10;
```

```
mysql>
mysql> SELECT 10 != 10;
+-----+
| 10 != 10 |
+-----+
| 0 |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT 15 > 14 && 99 - 5 <= 94;
+-----+
| 15 > 14 && 99 - 5 <= 94 |
+-----+
| 1 |
+-----+
1 row in set (0.00 sec)
```

```
mysql>
mysql> SELECT 1 IN (5,3) || 9 BETWEEN 8 AND 10;
+-----+
| 1 IN (5,3) || 9 BETWEEN 8 AND 10 |
+-----+
| 1 |
+-----+
1 row in set (0.01 sec)
```

Select All Books Written Before 1980 (non inclusive)

```
mysql>
mysql> SELECT title, released_year FROM books
-> WHERE released_year < 1980;
+-----+-----+
| title | released_year |
+-----+-----+
| Cannery Row | 1945 |
+-----+-----+
1 row in set (0.01 sec)
```

Select All Books Written By Eggers Or Chabon

exercises.sql
first_file.sql
like.sql
problems.sql

```
mysql>  
mysql> SELECT title, author_lname FROM books  
-> WHERE author_lname = 'Eggers' OR  
-> author_lname = 'Chabon';
```

title	author_lname
A Hologram for the King: A Novel	Eggers
The Circle	Eggers
The Amazing Adventures of Kavalier & Clay	Chabon
A Heartbreaking Work of Staggering Genius	Eggers

4 rows in set (0.00 sec)

first_file.sql
like.sql
problems.sql

```
mysql> SELECT title, author_lname FROM books  
-> WHERE author_lname IN ('Eggers', 'Chabon');
```

title	author_lname
A Hologram for the King: A Novel	Eggers
The Circle	Eggers
The Amazing Adventures of Kavalier & Clay	Chabon
A Heartbreaking Work of Staggering Genius	Eggers

4 rows in set (0.00 sec)

Select All Books Written By Lahiri, Published after 2000

```
mysql>  
mysql> SELECT title, author_lname, released_year FROM books  
-> WHERE author_lname = 'Lahiri';
```

title	author_lname	released_year
The Namesake	Lahiri	2003
Interpreter of Maladies	Lahiri	1996

2 rows in set (0.00 sec)

```
mysql>  
mysql> SELECT title, author_lname, released_year FROM books  
-> WHERE author_lname = 'Lahiri' AND released_year > 2000;
```

title	author_lname	released_year
The Namesake	Lahiri	2003

1 row in set (0.00 sec)

Select All books with page counts between 100 and 200

problems.sql

```
mysql> SELECT title, pages FROM books  
-> WHERE pages BETWEEN 100 AND 200;
```

title	pages
Interpreter of Maladies	198
What We Talk About When We Talk About Love: Stories	176
Cannery Row	181

3 rows in set (0.00 sec)

like.sql
problems.sql

```
mysql> SELECT title, pages FROM books  
-> WHERE pages >= 100 && pages <= 200;
```

title	pages
Interpreter of Maladies	198
What We Talk About When We Talk About Love: Stories	176
Cannery Row	181

3 rows in set (0.00 sec)

Select all books where author_lname starts with a 'C' or an 'S'

Commands
Notes
refining_selections
distinct.sql
exercises.sql
limit.sql
order_by.sql

```
169  
170  
171 SELECT title, author_lname FROM books  
172 WHERE author_lname starts with 'C' OR  
173        author_lname starts with 'S'  
174
```

173:27 Text Sources: 4

book_data.sql
exercises.sql
first_file.sql
like.sql
problems.sql

```
mysql> SELECT title, author_lname FROM books  
-> WHERE author_lname LIKE 'C%' OR  
->        author_lname LIKE 'S%';
```

title	author_lname
The Amazing Adventures of Kavalier & Clay	Chabon
Just Kids	Smith
What We Talk About When We Talk About Love: Stories	Carver
Where I'm Calling From: Selected Stories	Carver
Cannery Row	Steinbeck
Lincoln In The Bardo	Saunders

6 rows in set (0.00 sec)

exercises.sql
first_file.sql
like.sql
problems.sql

```
mysql> SELECT title, author_lname FROM books  
-> WHERE SUBSTR(author_lname,1,1) IN ('C','S');
```

title	author_lname
The Amazing Adventures of Kavalier & Clay	Chabon
Just Kids	Smith
What We Talk About When We Talk About Love: Stories	Carver
Where I'm Calling From: Selected Stories	Carver
Cannery Row	Steinbeck
Lincoln In The Bardo	Saunders

6 rows in set (0.00 sec)

If title contains 'stories' -> Short Stories
 Just Kids and A Heartbreaking Work -> Memoir
 Everything Else -> Novel

title	author_lname	TYPE
The Namesake	Lehiri	Novel
Norse Mythology	Gaiman	Novel
American Gods	Gaiman	Novel
Interpreter of Maladies	Lehiri	Novel
A Hologram for the King: A Novel	Eggers	Novel
The Circle	Eggers	Novel
The Amazing Adventures of Kavalier & Clay	Chabon	Novel
Just Kids	Smith	Memoir
A Heartbreaking Work of Staggering Genius	Eggers	Memoir
Coraline	Gaiman	Novel
What We Talk About When We Talk About Love: Stories	Carver	Short Stories
Where I'm Calling From: Selected Stories	Carver	Short Stories
White Noise	DeLillo	Novel
Cannery Row	Steinbeck	Novel
Oblivion: Stories	Foster Wallace	Short Stories
Consider the Lobster	Foster Wallace	Novel
10% Happier	Harris	Novel
fake book	Harris	Novel
Lincoln In The Bardo	Saunders	Novel

```

181
182 SELECT title, author_lname,
183        CASE
184          WHEN title LIKE '%stories%' THEN 'Short Stories'
185          WHEN title = 'Just Kids'      THEN 'Memoir'
186        END AS TYPE
187 FROM books;

```

```

184          WHEN title LIKE '%stories%' THEN 'Short Stories'
185          WHEN title = 'Just Kids' OR title = 'A Heartbreaking Work of Staggering Genius'
186            ELSE 'Novel'
187        END AS TYPE
188 FROM books;

```

Bonus: Make This Happen

title	author_lname	COUNT
What We Talk About When We Talk About Love: Stories	Carver	2 books
The Amazing Adventures of Kavalier & Clay	Chabon	1 book
White Noise	DeLillo	1 book
A Hologram for the King: A Novel	Eggers	3 books
Oblivion: Stories	Foster Wallace	2 books
Norse Mythology	Gaiman	3 books
10% Happier	Harris	1 book
fake book	Harris	1 book
The Namesake	Lehiri	2 books
Lincoln In The Bardo	Saunders	1 book
Just Kids	Smith	1 book
Cannery Row	Steinbeck	1 book

```

189
190
191 SELECT author_lname, COUNT(*) FROM books
192 GROUP BY author_lname;
193
194

```

author_lname	COUNT(*)
Carver	2
Chabon	1
DeLillo	1
Eggers	3
Foster Wallace	2
Gaiman	3
Harris	2
Lehiri	2
Saunders	1
Smith	1

```

190
191 SELECT author_lname, COUNT(*) FROM books
192 GROUP BY author_lname, author_fname;
193

```

```

191 SELECT author_lname,
192        CASE
193          WHEN COUNT(*) = 1 THEN 'book'
194          ELSE 'books'
195        END AS COUNT
196 FROM books
197 GROUP BY author_lname, author_fname;
198

```

like.sql
problems.sql

author_lname	COUNT
Carver	books
Chabon	book
DeLillo	book
Eggers	books
Foster Wallace	books
Gaiman	books
Harris	book
Harris	book
Lahiri	books
Saunders	book

Commands
Navigate

Logical Operators
Notes
refining_selections
distinct.sql
exercises.sql
limit.sql
order_by.sql
testing
book_code.sql

190

SELECT author_fname, author_lname,
191 CASE
192 WHEN COUNT(*) = 1 THEN '1 book'
193 ELSE CONCAT(COUNT(*),' books')
194 END AS COUNT
195 FROM books
196 GROUP BY author_lname, author_fname;
197
198

Online Designer

like.sql
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author_fname	author_lname	COUNT
Raymond	Carver	2 books
Michael	Chabon	1 book
Don	DeLillo	1 book
Dave	Eggers	3 books
David	Foster Wallace	2 books
Neil	Gaiman	3 books
Dan	Harris	1 book
Freida	Harris	1 book
Jhumpa	Lahiri	2 books
George	Saunders	1 book
Patti	Smith	1 book

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