

String Function & Selection Refining - SQL Session 5

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String Function & Selection Refining - SQL Session - 5

- SUBSTRING :

```
mysql> SELECT SUBSTRING('Hello World', 7);
+-----+
| SUBSTRING('Hello World', 7) |
| World                         |
+-----+
1 row in set (0.01 sec)
```

```
mysql> SELECT SUBSTRING('Hello World', -3);
+-----+
| SUBSTRING('Hello World', -3) |
| rld                          |
+-----+
1 row in set (0.00 sec)
```

```
+-----+ COPY
| short title |
+-----+
| The Name... |
| Norse Myth... |
| American G... |
| Interprete... |
| A Hologram... |
| The Circle... |
| The Amazin... |
| Just Kids... |
| A Heartbre... |
| Coraline... |
| What We Ta... |
| Where I'm ... |
| White Nois... |
| Cannery Ro... |
| Oblivion: ... |
| Consider t... |
+-----+
```

```
mysql> SELECT CONCAT(SUBSTR(title,1,10), "...") AS 'short title' FROM Books;
+-----+
| short title |
+-----+
| The Name... |
| Norse Myth... |
| American G... |
| Interprete... |
| A Hologram... |
| The Circle... |
| The Amazin... |
| Just Kids... |
| A Heartbre... |
| Coraline... |
| What We Ta... |
| Where I'm ... |
| White Nois... |
| Cannery Ro... |
| Oblivion: ... |
| Consider t... |
+-----+
16 rows in set (0.00 sec)
```

REPLACE :

```
mysql> SELECT REPLACE('Hello World', 'Hell', '%$#@');
+-----+
| REPLACE('Hello World', 'Hell', '%$#@') |
| %$#@o World                           |
+-----+
1 row in set (0.00 sec)
```

```
mysql> SELECT
    REPLACE('cheese bread coffee milk', ' ', ' and ');
+-----+
| REPLACE('cheese bread coffee milk', ' ', ' and ') |
| cheese and bread and coffee and milk            |
+-----+
1 row in set (0.00 sec)
```

REVERSE :

```
mysql> SELECT REVERSE('Hello World');
+-----+
| REVERSE('Hello World') |
| dlrow olleH           |
+-----+
1 row in set (0.00 sec)
```

Palindrome :

```
mysql> SELECT REVERSE('racecar')
    ;
+-----+
| REVERSE('racecar') |
| racecar            |
+-----+
1 row in set (0.00 sec)

mysql> SELECT CONCAT('woof', REVERSE('woof'));
+-----+
| CONCAT('woof', REVERSE('woof')) |
| wooffwoow                     |
+-----+
1 row in set (0.00 sec)
```

CHAR_LENGTH :

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

CHAR_LENGTH :

```
mysql> SELECT CHAR_LENGTH(title) FROM Books;
+-----+
| CHAR_LENGTH(title) |
+-----+
|      12 |
|      15 |
|      13 |
|      23 |
|      32 |
|      10 |
|      41 |
|       9 |
|      41 |
|      8 |
|      51 |
|      40 |
|      11 |
|      11 |
|      17 |
|      20 |
+-----+
16 rows in set (0.00 sec)
```

```
mysql> SELECT title, CHAR_LENGTH(title) FROM Books;
+-----+-----+
| title | CHAR_LENGTH(title) |
+-----+-----+
| The Namesake |          12 |
| Norse Mythology |        15 |
| American Gods |        13 |
| Interpreter of Maladies |  23 |
| A Hologram for the King: A Novel | 32 |
| The Circle |          10 |
| The Amazing Adventures of Kavalier & Clay | 41 |
| Just Kids |          9 |
| A Heartbreaking Work of Staggering Genius | 41 |
| Coraline |          8 |
| What We Talk About When We Talk About Love: Stories | 51 |
| Where I'm Calling From: Selected Stories | 40 |
| White Noise |          11 |
| Cannery Row |          11 |
| Oblivion: Stories |        17 |
| Consider the Lobster |        20 |
+-----+-----+
```

UPPER :

```
mysql> SELECT UPPER(title) FROM Books;
+-----+
| UPPER(title) |
+-----+
| 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 |
| WHITE NOISE |
| CANNERY ROW |
| OBLIVION: STORIES |
| CONSIDER THE LOBSTER |
+-----+
16 rows in set (0.00 sec)
```

LOWER :

```
mysql> SELECT Lower(title) FROM Books;
+-----+
| Lower(title) |
+-----+
| 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 |
| white noise |
| cannery row |
| oblivion: stories |
| consider the lobster |
+-----+
```

QUICK CHALLENGE :

Reverse and Uppercase the following sentence

"Why does my cat look at me with such hatred?"

```
mysql> SELECT UPPER(REVERSE("Why does my cat look at me with such hatred?"));
+-----+
| UPPER(REVERSE("Why does my cat look at me with such hatred?")) |
| ?DERTAH HCUS HTIW EM TA KOOL TAC YM SEOD YHW |
+-----+
1 row in set (0.00 sec)

mysql> SELECT REVERSE(UPPER("Why does my cat look at me with such hatred?"));
+-----+
| REVERSE(UPPER("Why does my cat look at me with such hatred?")) |
| ?DERTAH HCUS HTIW EM TA KOOL TAC YM SEOD YHW |
+-----+
1 row in set (0.00 sec)
```

Replace spaces in titles with '>->'

```
+-----+
| title |
+-----+
| The->Namesake |
+-----+
```

```

+-----+
| title
+-----+
| 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
| White->Noise
| Cannery->Row
| Oblivion:->Stories
+-----+

```

```

mysql> SELECT REPLACE(title, " " , ">") AS title FROM Books;
+-----+
| title
+-----+
| 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
| White->Noise
| Cannery->Row
| Oblivion:->Stories
| Consider->the->Lobster
+-----+
16 rows in set (0.00 sec)

```

Print This Out	
forwards	backwards
Lahiri	irihal
Gaiman	namiaG
Gaiman	namiaG
Lahiri	irihal
Eggers	sreggE
Eggers	sreggE
Chabon	nobahC
Smith	htimS
Eggers	sreggE
Gaiman	namiaG
Carver	revraC
Carver	revraC
DeLillo	ollieD
Steinbeck	kcebniets
Foster Wallace	ecallaW retsoF
Foster Wallace	ecallaW retsoF
Smith	htimS

```

mysql> SELECT author_lname as forward , REVERSE(author_lname) as backwards from books;
+-----+
| forward | backwards
+-----+
| Lahiri | irihal
| Gaiman | namiaG
| Gaiman | namiaG
| Lahiri | irihal
| Eggers | sreggE
| Eggers | sreggE
| Chabon | nobahC
| Smith | htimS
| Eggers | sreggE
| Gaiman | namiaG
| Carver | revraC
| Carver | revraC
| DeLillo | ollieD
| Steinbeck | kcebniets
| Foster Wallace | ecallaW retsoF
| Foster Wallace | ecallaW retsoF
+-----+

```

```

+-----+
| full name in caps
+-----+
| JHUMPA LAHIRI
| NEIL GAIMAN
| NEIL GAIMAN
| JHUMPA LAHIRI
| DAVE EGGRERS
| DAVE EGGRERS
| MICHAEL CHABON
| PATTI SMITH
| DAVE EGGRERS
| NEIL GAIMAN
| RAYMOND CARVER
| RAYMOND CARVER
| DON DELILLO
| JOHN STEINBECK
| DAVID FOSTER WALLACE
| DAVID FOSTER WALLACE
+-----+

```

```

mysql> SELECT UPPER(
    >>           CONCAT(
    >>           author_fname , " " , author_lname
    >>           )
    >) AS 'full name in caps'
    > FROM BOOKS;
+-----+
| full name in caps
+-----+
| JHUMPA LAHIRI
| NEIL GAIMAN
| NEIL GAIMAN
| JHUMPA LAHIRI
| DAVE EGGRERS
| DAVE EGGRERS
| MICHAEL CHABON
| PATTI SMITH
| DAVE EGGRERS
| NEIL GAIMAN
| RAYMOND CARVER
| RAYMOND CARVER
| DON DELILLO
| JOHN STEINBECK
| DAVID FOSTER WALLACE
| DAVID FOSTER WALLACE
+-----+

```

```
| DON DELILLO          |
| JOHN STEINBECK      |
| DAVID FOSTER WALLACE |
| DAVID FOSTER WALLACE |
```

```
| JOHN STEINBECK
| DAVID FOSTER WALLACE
| DAVID FOSTER WALLACE |
```

Make This Happen!

```
+-----+
| blurb
+-----+
| The Namesake was released in 2003
| Norse Mythology was released in 2016
| American Gods was released in 2001
| Interpreter of Maladies was released in 1996
| A Hologram for the King: A Novel was released in 2012
| The Circle was released in 2013
| The Amazing Adventures of Kavalier & Clay was released in 2000
| Just Kids was released in 2010
| A Heartbreaking Work of Staggering Genius: was released in 2001
| Coraline was released in 2003
| What We Talk About When We Talk About Love: Stories was released in 1981
| Where I'm Calling From: Selected Stories was released in 1989
| White Noise was released in 1985
| Cannery Row was released in 1945
| Oblivion: Stories was released in 2004
| Consider the Lobster was released in 2005
+-----+
```

COPY

```
mysql> SELECT CONCAT(title , " was released in " , released_year) AS blurb
-> FROM Books;
+-----+
| blurb
+-----+
| The Namesake was released in 2003
| Norse Mythology was released in 2016
| American Gods was released in 2001
| Interpreter of Maladies was released in 1996
| A Hologram for the King: A Novel was released in 2012
| The Circle was released in 2013
| The Amazing Adventures of Kavalier & Clay was released in 2000
| Just Kids was released in 2010
| A Heartbreaking Work of Staggering Genius was released in 2001
| Coraline was released in 2003
| What We Talk About When We Talk About Love: Stories was released in 1981
| Where I'm Calling From: Selected Stories was released in 1989
| White Noise was released in 1985
| Cannery Row was released in 1945
| Oblivion: Stories was released in 2004
| Consider the Lobster was released in 2005
+-----+
16 rows in set (0.00 sec)
```

Print book titles and the length of each title

title	character count
The Namesake	12
Norse Mythology	15
American Gods	13
Interpreter of Maladies	23
A Hologram for the King: A Novel	32
The Circle	10
The Amazing Adventures of Kavalier & Clay	41
Just Kids	9
A Heartbreaking Work of Staggering Genius	42
Coraline	8
What We Talk About When We Talk About Love: Stories	51
Where I'm Calling From: Selected Stories	40
White Noise	11
Cannery Row	11
Oblivion: Stories	17
Consider the Lobster	20

```
mysql> SELECT title , CHAR_LENGTH(title) AS 'character count' FROM Books;
+-----+
| title           | character count
+-----+
| The Namesake    | 12
| Norse Mythology | 15
| American Gods   | 13
| Interpreter of Maladies | 23
| A Hologram for the King: A Novel | 32
| The Circle      | 10
| The Amazing Adventures of Kavalier & Clay | 41
| Just Kids       | 9
| A Heartbreaking Work of Staggering Genius | 41
| Coraline        | 8
| What We Talk About When We Talk About Love: Stories | 51
| Where I'm Calling From: Selected Stories | 40
| White Noise     | 11
| Cannery Row     | 11
| Oblivion: Stories | 17
| Consider the Lobster | 20
+-----+
```

short title	author	quantity
American G...	Gaiman, Neil	12 in stock
A Heartbre...	Eggers, Dave	104 in stock

```
mysql> SELECT
->  CONCAT(SUBSTR(title,1,10) , "...") AS 'short title',
->  CONCAT(author_lname , "," , author_fname) as author,
->  CONCAT(stock_quantity , " in stock") as quantity
->  FROM Books where released_year = 2001;
+-----+
| short title | author      | quantity
+-----+
| American G... | Gaiman,Neil | 12 in stock
| A Heartbre... | Eggers,Dave | 104 in stock
+-----+
2 rows in set (0.00 sec)
```

```
| A Heartbre... | Eggers, Dave | 104 in stock |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

INSERTING 3 NEW BOOKS :

```
INSERT INTO books
  (title, author_fname, author_lname, released_year, stock_quantity, pages)
VALUES ('10% Happier', 'Dan', 'Harris', 2014, 29, 256),
       ('fake_book', 'Freida', 'Harris', 2001, 287, 428),
       ('Lincoln In The Bardo', 'George', 'Saunders', 2017, 1000, 367);
```

```
mysql> INSERT INTO books
->   (title, author_fname, author_lname, released_year, stock_quantity, pages)
-> VALUES ('10% Happier', 'Dan', 'Harris', 2014, 29, 256),
->          ('fake_book', 'Freida', 'Harris', 2001, 287, 428),
->          ('Lincoln In The Bardo', 'George', 'Saunders', 2017, 1000, 367);
Query OK, 3 rows affected (0.02 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM books;
+----+-----+-----+-----+-----+-----+
| book_id | title | author_fname | author_lname | released_year | stock_quantity | pages |
+----+-----+-----+-----+-----+-----+
| 1 | The Namesake | Jhumpa | Lahiri | 2003 | 32 | 291 |
| 2 | Norse Mythology | Neil | Gaiman | 2016 | 43 | 304 |
| 3 | American Gods | Neil | Gaiman | 2011 | 32 | 405 |
| 4 | Interpreter of Maladies | Jhumpa | Lahiri | 1996 | 97 | 198 |
| 5 | A Hologram for the King: A Novel | Dave | Eggers | 2012 | 154 | 352 |
| 6 | The Goldfinch | Don | DeLillo | 2013 | 26 | 501 |
| 7 | The Amazing Adventures of Kavalier & Clay | Michael | Chabon | 2000 | 68 | 634 |
| 8 | Just Kids | Patti | Smith | 2010 | 55 | 304 |
| 9 | A Heartbreaking Work of Staggering Genius | Dave | Eggers | 2001 | 104 | 437 |
| 10 | Salvage the Bones | Neil | Gaiman | 2013 | 100 | 200 |
| 11 | What We Talk About When We Talk About Love: Stories | Raymond | Carver | 1981 | 23 | 176 |
| 12 | Where I'm Calling From: Selected Stories | Raymond | Carver | 1989 | 12 | 526 |
| 13 | The Metamorphosis | Franz | Kafka | 1915 | 49 | 320 |
| 14 | Cannery Row | John | Steinbeck | 1945 | 95 | 181 |
| 15 | Oblivion: Stories | David | Foster Wallace | 2004 | 172 | 329 |
| 16 | The Lobster | Don | DeLillo | 2005 | 92 | 348 |
| 17 | 10% Happier | Dan | Harris | 2014 | 29 | 256 |
| 18 | fake_book | Freida | Harris | 2001 | 287 | 428 |
| 19 | Lincoln In The Bardo | George | Saunders | 2017 | 1000 | 367 |
+----+-----+-----+-----+-----+-----+
19 rows in set (0.00 sec)
```

USE OF DISTINCT : To Find unique values.

```
mysql> SELECT DISTINCT author_lname FROM books;
+-----+
| author_lname |
+-----+
| Lahiri |
| Gaiman |
| Eggers |
| Chabon |
| Smith |
| Carver |
| DeLillo |
| Steinbeck |
| Foster Wallace |
| Harris |
| Saunders |
+-----+
11 rows in set (0.00 sec)

mysql> SELECT DISTINCT author_fname FROM books;
+-----+
| author_fname |
+-----+
| Jhumpa |
| Neil |
| Dave |
| Michael |
| Patti |
| Raymond |
| Don |
| John |
| David |
| Dan |
| Freida |
| George |
+-----+
12 rows in set (0.00 sec)
```

Loss of 1 author in my dataset.

It is recommended to first merge the author and then find the distinct value of it.

```
mysql> SELECT DISTINCT CONCAT(author_fname , " ", author_lname) as 'Full Name'
->   FROM Books;
+-----+
| Full Name |
+-----+
| Jhumpa Lahiri |
| Neil Gaiman |
| Dave Eggers |
| Michael Chabon |
| Patti Smith |
| Raymond Carver |
| Don DeLillo |
| John Steinbeck |
| David Foster Wallace |
| Dan Harris |
| Freida Harris |
| George Saunders |
+-----+
12 rows in set (0.00 sec)
```

SORTING : ORDER BY(ASC,DESC)

By Default

- Sort the result alphabetically or numeric values either a-z , z-a , or Low - High , High - Low.

```
SELECT author_lname FROM at line 1
mysql> SELECT author_lname FROM books ORDER BY author_lname;
+-----+
| author_lname |
+-----+
| Carver |
| Carver |
| Chabon |
| DeLillo |
| Eggers |
| Eggers |
| Eggers |
| Foster Wallace |
| Foster Wallace |
| Gaiman |
| Gaiman |
| Gaiman |
| Harris |
| Harris |
| Harris |
| Harris |
| Lahiri |
| Lahiri |
+-----+
19 rows in set (0.00 sec)
```

by default
Ascending

```

+-----+
| Gaiman |
| Gaiman |
| Harris |
| Lahiri |
| Lahiri |
| Saunders |
| Saunders |
| Smith |
| Steinbeck |
+-----+

```

```

mysql> SELECT author_lname FROM books ORDER BY author_lname DESC;
+-----+
| author_lname |
+-----+
| Steinbeck |
| Smith |
| Saunders |
| Saunders |
| Lahiri |
| Lahiri |
| Harris |
| Gaiman |
| Gaiman |
| Gaiman |
| Foster Wallace |
| Foster Wallace |
| Eggers |
| Eggers |
| Eggers |
| DeLillo |
| Chabon |
| Carver |
| Carver |
+-----+
22 rows in set (0.00 sec)

```

Descending.

Dealing with Numerical Value :

```

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 | 1948 |
| White Noise | 1985 |
| Where I'm Calling From: Selected Stories | 1989 |
| Interpreter of Maladies | 1996 |
| The Amazing Adventures of Kavalier & Clay | 2000 |
| American Gods | 2001 |
| A Heartbreaking Work of Staggering Genius | 2001 |
| fake_book | 2001 |
| fake_book | 2001 |
| The Namesake | 2003 |
| Coraline | 2003 |
| Oblivion: Stories | 2004 |
| Consider the Lobster | 2005 |
| Just Kids | 2009 |
| A Hologram for the King: A Novel | 2012 |
| The Circle | 2013 |
| 10% Happier | 2014 |
| 10% Happier | 2014 |
| Norse Mythology | 2016 |
| Lincoln In The Bardo | 2017 |
| Lincoln In The Bardo | 2017 |
+-----+-----+
22 rows in set (0.00 sec)

```

Forget this : I had added the data Twice.

Okay , Let me fix it.

1 2 3

```

mysql> SELECT title, author_fname, author_lname
-> FROM books ORDER BY 2;
+-----+-----+-----+
| title | author_fname | author_lname |
+-----+-----+-----+
| 10% Happier | Dan | Harris |
| A Hologram for the King: A Novel | Dave | Eggers |
| The Circle | Dave | Eggers |
| A Heartbreaking Work of Staggering Genius | Dave | Eggers |
| Oblivion: Stories | David | Foster Wallace |
| Consider the Lobster | David | Foster Wallace |
| Just Kids | Don | DeLillo |
| What We Talk About When We Talk About Love: Stories | Freida | Harris |
| Where I'm Calling From: Selected Stories | George | Saunders |
| The Namesake | Jhumpa | Lahiri |
| Interpreter of Maladies | Jhumpa | Lahiri |
| Cannery Row | John | Steinbeck |
| The Amazing Adventures of Kavalier & Clay | Michael | Chabon |
| American Gods | Neil | Gaiman |
| Coraline | Neil | Gaiman |
| Norse Mythology | Neil | Gaiman |
| Lincoln In The Bardo | Patti | Smith |
| Lincoln In The Bardo | Raymond | Carver |
| Lincoln In The Bardo | Raymond | Carver |
+-----+-----+-----+
19 rows in set (0.00 sec)

```

Representing
author_fname;

```

mysql> SELECT author_fname, author_lname FROM books
-> ORDER BY author_lname, author_fname;
+-----+-----+
| author_fname | author_lname |
+-----+-----+
| Raymond | Carver |
| Raymond | Carver |
| Michael | Chabon |
| Don | DeLillo |
| Dave | Eggers |
| Dave | Eggers |
| Dave | Eggers |
| David | Foster Wallace |
| David | Foster Wallace |
| Neil | Gaiman |
| Neil | Gaiman |
| Neil | Gaiman |
| Dan | Harris |
| Freida | Harris |
| Jhumpa | Lahiri |
| Jhumpa | Lahiri |
| George | Saunders |
| Patti | Smith |
| John | Steinbeck |
+-----+-----+
19 rows in set (0.00 sec)

```

```

mysql> SELECT author_fname, author_lname FROM books
-> ORDER BY 2,1;
+-----+-----+
| author_fname | author_lname |
+-----+-----+
| Raymond | Carver |
| Raymond | Carver |
| Michael | Chabon |
| Don | DeLillo |
| Dave | Eggers |
| Dave | Eggers |
| Dave | Eggers |
| David | Foster Wallace |
| David | Foster Wallace |
| Neil | Gaiman |
| Neil | Gaiman |
| Neil | Gaiman |
| Dan | Harris |
| Freida | Harris |
| Jhumpa | Lahiri |
| Jhumpa | Lahiri |
| George | Saunders |
| Patti | Smith |
| John | Steinbeck |
+-----+-----+
19 rows in set (0.00 sec)

```

rather than
calling the
name of the
column, we will
try to pass
the index of
whichever order
it is being
called.

LIMIT : Restricts the content to limited views.

```

mysql> SELECT title, released_year FROM books
-> ORDER BY released_year DESC LIMIT 5;

```

SELECT STATEMENT WITH ORDER BY AND LIMIT

```
mysql> SELECT title, released_year FROM books
-> ORDER BY released_year DESC LIMIT 5;
+-----+-----+
| title | released_year |
+-----+-----+
| Lincoln In The Bardo | 2017 |
| Norse Mythology | 2016 |
| 10% Happier | 2014 |
| The Circle | 2013 |
| A Hologram for the King: A Novel | 2012 |
+-----+-----+
5 rows in set (0.00 sec)
```

Sorting is required and the limit will only take top 5 values out of 19 records.

```
mysql> SELECT title, released_year FROM books
-> ORDER BY released_year DESC LIMIT 0,5;
+-----+-----+
| title | released_year |
+-----+-----+
| Lincoln In The Bardo | 2017 |
| Norse Mythology | 2016 |
| 10% Happier | 2014 |
| The Circle | 2013 |
| A Hologram for the King: A Novel | 2012 |
+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> SELECT title, released_year FROM books
-> ORDER BY released_year DESC LIMIT 5,7;
+-----+-----+
| title | released_year |
+-----+-----+
| Just Kids | 2010 |
| Consider the Lobster | 2005 |
| Oblivion: Stories | 2004 |
| The Namesake | 2003 |
| Coraline | 2003 |
| American Gods | 2001 |
| A Heartbreaking Work of Staggering Genius | 2001 |
+-----+-----+
7 rows in set (0.00 sec)
```

LIKE :

wildcards

- (%) - use for variable count search
- (_) - representing single character or a digit.

```
mysql> SELECT author_fname from Books where author_fname like '%da%';
+-----+
| author_fname |
+-----+
| Dave |
| Dave |
| Dave |
| David |
| David |
| Dan |
| Freida |
+-----+
7 rows in set (0.00 sec)

mysql> SELECT author_fname from Books where author_fname like 'da%';
+-----+
| author_fname |
+-----+
| Dave |
| Dave |
| Dave |
| David |
| David |
| Dan |
+-----+
6 rows in set (0.00 sec)
```

Find stock quantity with 4 digits. USE _ wildcard.

```
mysql> SELECT title , stock_quantity from books WHERE stock_quantity LIKE '____';
+-----+-----+
| title | stock_quantity |
+-----+-----+
| Lincoln In The Bardo | 1000 |
+-----+-----+
1 row in set (0.00 sec)
```

- USE OF ESCAPE CHARACTER "\": which help us to find the wildcard value present in my data.

```
mysql> SELECT title from books WHERE title LIKE '%\%%';
+-----+
| title |
+-----+
| 10% Happier |
+-----+
1 row in set (0.00 sec)

mysql> SELECT title from books WHERE title LIKE '%\_%';
+-----+
| title |
+-----+
| fake_book |
+-----+
1 row in set (0.00 sec)
```