

## WHAT IS THE REGEX:

An abbreviation of Regular Expressions, and its literal meaning is regular expressions.

They depend on the so-called pattern and can be called regex or regexp. It is a method used in describing texts to search and match within the text or sentences to make a comparison on them and then extract them or verify their validity. For example, if you want to delete all the spaces in a file, you can do it by manually searching in the file and deleting all the spaces that you find, or To build a script that contains a huge number of If conditions and loops and check each character for whether it is a space or not, and the last solution is by using the Regex, you can do all of the above

with one simple phrase that does not exceed one line, using regular expressions saves you time And a huge effort, especially in dealing with large texts, you can use this technique with many languages such as Java, PHP , Python, C, JavaScript and others.

Name: Nada Magdy Maher Tawfik

ID: 4211069

Section: B1

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

Tables

customers

employees

offices

orderdetails

orders

payments

productlines

products

Views

Stored Procedures

Functions

sakila

sys

world

Administration

Schemas

Information

No object selected

Query 1

Limit to 1000 rows

1

2

3

4

SELECT

customerName

creditLimit,

creditLimit \* 10 As new\_creditLimit

FROM customers;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

creditLimit	new_creditLimit
Atelier graphique	210000.00
Signal Gift Stores	718000.00
Australian Collectors, Co.	1173000.00
La Rochelle Gifts	1182000.00
Baane Mini Imports	817000.00
Mini Gifts Distributors Ltd.	2105000.00
Havel & Zbyszek Co	0.00
Blauer See Auto, Co.	597000.00
Mini Wheels Co.	646000.00
Land of Toys Inc.	1149000.00
Euro+ Shopping Channel	2276000.00
Volvo Model Replicas, Co	531000.00
Danish Wholesale Imports	834000.00

Result 1

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	16:07:54	SELECT customerName creditLimit, creditLimit * 10 As new_creditLimit FROM customers LIMIT 0, 1000	122 row(s) returned	0.000 sec / 0.000 sec

Type here to search

4:07 PM

2/28/2022

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

Tables

customers

employees

offices

orderdetails

orders

payments

productlines

products

Views

Stored Procedures

Functions

sakila

sys

world

Administration

Schemas

Information

No object selected

Query 1

Limit to 1000 rows

1SELECT \*  
2FROM orders  
3WHERE orderDate >= '2003-01-01';

Result Grid

	orderNumber	orderDate	requiredDate	shippedDate	status	comments	customerNumber
▶	10100	2003-01-06	2003-01-13	2003-01-10	Shipped	NULL	363
	10101	2003-01-09	2003-01-18	2003-01-11	Shipped	Check on availability.	128
	10102	2003-01-10	2003-01-18	2003-01-14	Shipped	NULL	181
	10103	2003-01-29	2003-02-07	2003-02-02	Shipped	NULL	121
	10104	2003-01-31	2003-02-09	2003-02-01	Shipped	NULL	141
	10105	2003-02-11	2003-02-21	2003-02-12	Shipped	NULL	145
	10106	2003-02-17	2003-02-24	2003-02-21	Shipped	NULL	278
	10107	2003-02-24	2003-03-03	2003-02-26	Shipped	Difficult to negotiate with customer. We need m...	131
	10108	2003-03-03	2003-03-12	2003-03-08	Shipped	NULL	385
	10109	2003-03-10	2003-03-19	2003-03-11	Shipped	Customer requested that FedEx Ground is used...	486
	10110	2003-03-18	2003-03-24	2003-03-20	Shipped	NULL	187
	10111	2003-03-25	2003-03-31	2003-03-30	Shipped	NULL	129
	10112	2003-03-24	2003-04-03	2003-03-29	Shipped	Customer requested that ad materials (such as ...	144

orders 2

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	16:07:54	SELECT customerName creditLimit, creditLimit * 10 As new_creditLimit FROM customers LIMIT 0, 1000	122 row(s) returned	0.000 sec / 0.000 sec
✓ 2	16:11:07	SELECT * FROM orders WHERE orderDate >= '2003-01-01' LIMIT 0, 1000	326 row(s) returned	0.000 sec / 0.000 sec

Type here to search

Taskbar

4:11 PM  
2/28/2022

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

- Tables
  - customers
  - employees
  - offices
  - orderdetails
  - orders
  - payments
  - productlines
  - products
- Views
- Stored Procedures
- Functions

sakila

sys

world

Administration

Schemas

Information

No object selected

Object Info

Session

Query 1

Limit to 1000 rows

1SELECT \*  
2FROM customers  
3WHERE customerNumber IN (141, 131, 321,286);

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit
▶	131	Land of Toys Inc.	Lee	Kwai	2125557818	897 Long Airport Avenue	NULL	NYC	NY	10022	USA	1323	114900.00
	141	Euro+ Shopping Channel	Freyre	Diego	(91) 555 94 44	C/Moralzarzal, 86	NULL	Madrid	NULL	28034	Spain	1370	227600.00
	286	Marta's Replicas Co.	Hernandez	Marta	6175558555	39323 Spinnaker Dr.	NULL	Cambridge	MA	51247	USA	1216	123700.00
	321	Corporate Gift Ideas Co.	Brown	Julie	6505551386	7734 Strong St.	NULL	San Francisco	CA	94217	USA	1165	105000.00
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

customers 3

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	16:07:54	SELECT customerName creditLimit, creditLimit * 10 As new_creditLimit FROM customers LIMIT 0, 1000	122 row(s) returned	0.000 sec / 0.000 sec
✓ 2	16:11:07	SELECT * FROM orders WHERE orderDate >= '2003-01-01' LIMIT 0, 1000	326 row(s) returned	0.000 sec / 0.000 sec
✓ 3	16:13:31	SELECT * FROM customers WHERE customerNumber IN (141, 131, 321,286) LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec

Type here to search

Taskbar icons

4:13 PM  
2/28/2022





MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

Tables

customers

employees

offices

orderdetails

orders

payments

productlines

products

Views

Stored Procedures

Functions

sakila

sys

world

AdministrationSchemas

Information

No object selected

Query 1

Limit to 1000 rows

1SELECT \*

2FROM customers

3WHERE creditLimit >= 1000000 AND

4customerNumber < 200

5OR country IN ("USA");

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit
▶	112	Signal Gift Stores	King	Jean	7025551838	8489 Strong St.	NULL	Las Vegas	NV	83030	USA	1166	71800.00
	124	Mini Gifts Distributors Ltd.	Nelson	Susan	4155551450	5677 Strong St.	NULL	San Rafael	CA	97562	USA	1165	210500.00
	129	Mini Wheels Co.	Murphy	Julie	6505555787	5557 North Pendale Street	NULL	San Francisco	CA	94217	USA	1165	64600.00
	131	Land of Toys Inc.	Lee	Kwai	2125557818	897 Long Airport Avenue	NULL	NYC	NY	10022	USA	1323	114900.00
	151	Muscle Machine Inc.	Young	Jeff	2125557413	4092 Furth Circle	Suite 400	NYC	NY	10022	USA	1286	138500.00
	157	Diecast Classics Inc.	Leong	Kelvin	2155551555	7586 Pompton St.	NULL	Allentown	PA	70267	USA	1216	100600.00
	161	Technics Stores Inc.	Hashimoto	Juri	6505556809	9408 Furth Circle	NULL	Burlingame	CA	94217	USA	1165	84600.00
	168	American Souvenirs Inc	Franco	Keith	2035557845	149 Spinnaker Dr.	Suite 101	New Haven	CT	97823	USA	1286	0.00
	173	Cambridge Collectables Co.	Tseng	Jerry	6175555555	4658 Baden Av.	NULL	Cambridge	MA	51247	USA	1188	43400.00
	175	Gift Depot Inc.	King	Julie	2035552570	25593 South Bay Ln.	NULL	Bridgewater	CT	97562	USA	1323	84300.00
	181	Vitachrome Inc.	Frick	Michael	2125551500	2678 Kingston Rd.	Suite 101	NYC	NY	10022	USA	1286	76400.00
	198	Auto-Moto Classics Inc.	Taylor	Leslie	6175558428	16780 Pompton St.	NULL	Brickhaven	MA	58339	USA	1216	23000.00
	204	Online Mini Collectables	Barajas	Minuel	6175557555	7635 Spinnaker Dr.	NULL	Brickhaven	MA	58339	USA	1188	68700.00

customers 5

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	16:07:54	SELECT customerName creditLimit, creditLimit * 10 As new_creditLimit FROM customers LIMIT 0, 1000	122 row(s) returned	0.000 sec / 0.000 sec
✓ 2	16:11:07	SELECT * FROM orders WHERE orderDate >= '2003-01_01' LIMIT 0, 1000	326 row(s) returned	0.000 sec / 0.000 sec
✓ 3	16:13:31	SELECT * FROM customers WHERE customerNumber IN (141, 131, 321,286) LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
✓ 4	16:16:59	SELECT * FROM customers WHERE creditLimit BETWEEN 100000 AND 110000 LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
✓ 5	16:22:51	SELECT * FROM customers WHERE creditLimit >= 1000000 AND customerNumber < 200 OR country IN ("US...	36 row(s) returned	0.000 sec / 0.000 sec

Object InfoSession

Type here to search

Taskbar icons: File Explorer, Edge, Mail, MySQL Workbench, Chrome, Word, Teams, Photos, PowerPoint

System tray: Network, Volume, ENG, 4:23 PM 2/28/2022, 3 notifications

MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

Tables

customers

employees

offices

orderdetails

orders

payments

productlines

products

Views

Stored Procedures

Functions

sakila

sys

world

Administration

Schemas

Information

No object selected

Query 1

Limit to 1000 rows

1 • SELECT customerName,  
2 creditLimit,  
3 creditLimit + 2000 AS new\_creditLimit  
4 FROM customers  
5 ORDER BY creditLimit DESC;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

customerName	creditLimit	new_creditLimit
Euro+ Shopping Channel	227600.00	229600.00
Mini Gifts Distributors Ltd.	210500.00	212500.00
Vida Sport, Ltd	141300.00	143300.00
Muscle Machine Inc	138500.00	140500.00
AV Stores, Co.	136800.00	138800.00
Saveley & Henriot, Co.	123900.00	125900.00
Marta's Replicas Co.	123700.00	125700.00
L'ordine Souvenirs	121400.00	123400.00
Heintze Collectables	120800.00	122800.00
Toms Spezialitäten, Ltd	120400.00	122400.00
Rovelli Gifts	119600.00	121600.00
La Rochelle Gifts	118200.00	120200.00
Australian Collectors, Co.	117300.00	119300.00
Scandinavian Gift Ideas	116400.00	118400.00
Land of Toys Inc.	114900.00	116900.00
Online Diecast Creations ...	114200.00	116200.00
Amica Models & Co.	113000.00	115000.00
Kelly's Gift Shop	110000.00	112000.00
Anna's Decorations. Ltd	107800.00	109800.00

Result 6

Read Only

Object Info

Session

Output

Type here to search

Taskbar icons: File Explorer, Edge, Mail, MySQL Workbench, Chrome, Word, Teams, PowerPoint, Photos

System tray: Network, Volume, Date/Time (4:27 PM 2/28/2022), Language (ENG), Notifications (3)



MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

Tables

customers

employees

offices

orderdetails

orders

payments

productlines

products

Views

Stored Procedures

Functions

sakila

sys

world

AdministrationSchemas

Information

No object selected

Object InfoSession

Query 1

Limit to 1000 rows

1 • SELECT \*

2 FROM customers

3 ORDER BY creditLimit DESC

4 LIMIT 1, 3;

Result Grid

Filter Rows:

customerNumber

customerName

contactLastName

contactFirstName

phone

addressLine1

addressLine2

city

state

postalCode

country

salesRepEmployeeNumber

creditLimit

124

Mini Gifts Distributors Ltd.

Nelson

Susan

4155551450

5677 Strong St.

NULL

San Rafael

CA

97562

USA

1165

210500.00

298

Vida Sport, Ltd

Holz

Mihael

0897-034555

Grenzacherweg 237

NULL

Genève

NULL

1203

Switzerland

1702

141300.00

151

Muscle Machine Inc

Young

Jeff

2125557413

4092 Furth Circle

Suite 400

NYC

NY

10022

USA

1286

138500.00

NULL

NULL

NULL

NULL

NULL

NULL

NULL

NULL

customers 7

Apply

Revert

Output

Action Output

#

Time

Action

Message

Duration / Fetch

1

16:07:54

SELECT customerName creditLimit, creditLimit \* 10 As new\_creditLimit FROM customers LIMIT 0, 1000

122 row(s) returned

0.000 sec / 0.000 sec

2

16:11:07

SELECT \* FROM orders WHERE orderDate >= '2003-01-01' LIMIT 0, 1000

326 row(s) returned

0.000 sec / 0.000 sec

3

16:13:31

SELECT \* FROM customers WHERE customerNumber IN (141, 131, 321,286) LIMIT 0, 1000

4 row(s) returned

0.000 sec / 0.000 sec

4

16:16:59

SELECT \* FROM customers WHERE creditLimit BETWEEN 100000 AND 110000 LIMIT 0, 1000

8 row(s) returned

0.000 sec / 0.000 sec

5

16:22:51

SELECT \* FROM customers WHERE creditLimit >= 1000000 AND customerNumber < 200 OR country IN ("US...

36 row(s) returned

0.000 sec / 0.000 sec

6

16:27:09

SELECT customerName, creditLimit, creditLimit + 2000 AS new\_creditLimit FROM customers ORDER BY creditLi...

122 row(s) returned

0.000 sec / 0.000 sec

7

16:30:22

SELECT \* FROM customers ORDER BY creditLimit DESC LIMIT 1, 3

3 row(s) returned

0.000 sec / 0.000 sec

Type here to search


4:30 PM

2/28/2022

Query 1 ×



```
1 • SELECT contactFirstName
2 FROM customers
3 WHERE contactFirstName REGEXP '^je';
```

Result  
Grid
Form Editor

 Field Types

 Read Only

customers 5 x

 Action Output

#	Time	Action	Message	Duration / Fetch
✓	1 18:29:25	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'je%' LIMIT 0, 1000	0 row(s) returned	0.015 sec / 0.000 sec
✓	2 18:29:39	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'je%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
✓	3 18:30:46	SELECT contactFirstName FROM customers WHERE contactFirstName LIKE 'je%' LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
✓	4 18:31:20	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'je%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
✓	5 18:36:02	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^je' LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec

Session



MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

sakila

sys

world

Administration

Schemas

Information

Schema: classicmodels

Query 1

Limit to 1000 rows

1 • SELECT contactFirstName

2 FROM customers

3 WHERE contactFirstName REGEXP 'e1\$'OR

4 contactFirstName REGEXP 'ie?' ;

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

contactFirstName

Carine

Janine

Julie

Kwai

Diego

Christina

Eric

Kelvin

Juri

Veysel

Keith

Isabel

Martine

Marie

Julie

Michael

Matti

Rachel

customers 10

Object Info

Session

Action Output

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan

Read Only

Type here to search

6:51 PM

2/28/2022

ENG



MySQL Workbench

Local instance MySQL80

FileEditViewQueryDatabaseServerToolsScriptingHelp

Navigator

SCHEMAS

Filter objects

classicmodels

sakila

sys

world

Query 1

Limit to 1000 rows

1SELECT contactFirstName

2FROM customers

3WHERE contactFirstName REGEXP 'bg|ba'

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

contactFirstName

customers 11

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	18:30:46	SELECT contactFirstName FROM customers WHERE contactFirstName LIKE 'je%' LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
4	18:31:20	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'je%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
5	18:36:02	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^je' LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
6	18:43:07	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^je'OR '^le' LIMIT 0, 1000	5 row(s) returned	0.000 sec / 0.000 sec
7	18:45:49	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^je'OR contactFirstName ...	7 row(s) returned	0.000 sec / 0.000 sec
8	18:49:31	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^el'OR contactFirstName ...	2 row(s) returned	0.000 sec / 0.000 sec
9	18:50:03	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP '^el'OR contactFirstName ...	2 row(s) returned	0.000 sec / 0.000 sec
10	18:50:47	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'el\$'OR contactFirstName ...	56 row(s) returned	0.000 sec / 0.000 sec
11	18:54:03	SELECT contactFirstName FROM customers WHERE contactFirstName REGEXP 'bg ba' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec

AdministrationSchemas

Information

Schema: classicmodels

Object Info

Session

Type here to search

Taskbar icons

6:54 PM 2/28/2022