

We use regular expression (REGEXP) Operator is extremely powerful when it comes to searching for strings. So they allow us to search for more complex patterns .

we use **^** to represent the beginning of a string 'a' for example this means that the engine should search for strings that start with the letter a .

we use **\$** to represent the end

we use **|** to represent the logical OR so it can supply multiple search patterns.

We use **[]** to match any thing in the bracket for example [adf] any thing that has ( a or d or f ) in the string

We use **[-]** to match a range of characters for example [a-d] means letters between (a and d) .

1-

The screenshot shows a SQL IDE interface. On the left is a 'Navigator' pane with a tree view of the 'classicmodels' schema, including tables like 'customers', 'employees', 'offices', 'orders', 'orderdetails', 'products', 'suppliers', and 'shippers'. The main window displays a SQL query in a text editor:

```
1 • USE classicmodels;
2 • SELECT *
3 • FROM customers
4 • WHERE contactFirstName REGEXP '^je|^le'
5 • ORDER BY "new_credit" DESC;
```

Below the query editor is a 'Result Grid' showing the results of the query. The grid has 12 columns: customerNumber, customerName, contactLastName, contactFirstName, phone, addressLine1, addressLine2, city, state, postalCode, country, and salesRepEmployeeNum. The results are sorted by 'new\_credit' in descending order. The first few rows are:

customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNum
112	Signal Gift Stores	King	Jean	7025551838	8489 Strong St.		Las Vegas	NV	83030	USA	1166
151	Muscle Machine Inc	Young	Jeff	2125557413	4092 Furth Circle	Suite 400	NYC	NY	10022	USA	1286
173	Cambridge Collectables Co.	Tseng	Jerry	6175555555	4658 Baden Av.		Cambridge	MA	51247	USA	1188
198	Auto-Moto Classics Inc.	Taylor	Leslie	6175558428	16780 Pompton St.		Bridghaven	MA	58339	USA	1216
233	Québec Home Shopping ...	Fresnière	Jean	(514) 555-8054	43 rue St. Laurent		Montréal	Québec	H1J 1C3	Canada	1286
344	CAF Imports	Fernandez	Jesus	+34 913 728 555	Merchants House	27-30 Merchant's Quay	Madrid		28023	Spain	1702
455	Super Scale Inc.	Murphy	Leslie	2035559545	567 North Pendale Street		New Haven	CT	97823	USA	1286

At the bottom of the IDE, there is a 'Schema: classicmodels' label.

Navigator

Schemas

Filter objects

- classmodels
  - Tables
    - customers
      - Columns
        - customerNum
        - customerNum
        - contactLastN
        - contactFirstN
        - phone
        - addressLine1
        - addressLine2
        - city
        - state
        - postalCode
        - country
        - salesRepEmp
        - creditLimit

Indexes

Foreign Keys

Triggers

employees

offices

orderdetails

orders

Administration Schemas

Information

Schema: **classmodels**

1

2

Limit to 1000 rows

```

1  USE classmodels;
2  SELECT
3  FROM customers
4  WHERE contactFirstName REGEXP 'els|ie'
5  ORDER BY "new_credit" DESC;

```

Result Grid

Filter Rows

Edits

Export/Import

Wrap Cell Contents

	customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber
129	Mini Wheels Co.	Murphy	Julie		6505555787	5557 North Pendale Street		San Francisco	CA	94217	USA	1165
141	Euro-Shopping Channel	Freyre	Diego		(91) 555 94 94	C/ Moralezaral, 86		Madrid		28034	Spain	1370
167	Herkulu Gifts	Oeztan	Veyssel		47 2267 3215	Brehmen St. 121	PR 334 Sentrum	Bergen	N 5804		Norway	1504
172	La Corne d'abondance, Co.	Bertrand	Marie		(1) 42.34.2555	265, boulevard Charonne		Paris		75012	France	1337
175	Gift Depot Inc.	King	Julie		2035552570	25593 South Bay Ln.		Bridgewater	CT	97562	USA	1323
181	Vitadrome Inc.	Frick	Michael		2125551500	2678 Kingston Rd.	Suite 101	NYC	NY	10022	USA	1286
187	AV Stores, Co.	Ashworth	Rachel		(171) 555-1555	Faunteroy Circus		Manchester		EC2 5NT	UK	1501
198	Auto-Moto Classics Inc.	Taylor	Leslie		6175558428	16780 Pompton St.		Bridghaven	MA	58339	USA	1216
204	Online Mini Collectables	Barajas	Miguel		6175557555	7635 Sprinkler Dr.		Bridghaven	MA	58339	USA	1158
205	ToyR4GrownUps.com	Young	Julie		6265557265	78934 Hillside Dr.		Pasadena	CA	90003	USA	1166
239	Collectable Mini Designs Co.	Thompson	Valarie		7605558146	361 Furth Circle		San Diego	CA	91217	USA	1166
250	Lyon Souvenirs	Da Silva	Daniel		+33 1 46 62 7...	27 rue du Colonel Pierre A...		Paris		75508	France	1337
256	Auto Assocés & Cie.	Tonini	Daniel		30.59.8555	67, avenue de l'Europe		Verailles		78000	France	1370
259	Toms Spezialitäten, Ltd	Pfalzheim	Henriette		0221-5554327	Mehrheimerstr. 369		Köln		50739	Germany	1504

**Navigator**

**SCHEMAS**

Filter objects

- classicmodels
  - Tables
    - customers
      - Columns
        - customerNum
        - customerName
        - contactLastN
        - contactFirstN
        - phone
        - addressLine1
        - addressLine2
        - city
        - state
        - postalCode
        - country
        - salesRepEmp
        - creditLimit

**SQL Query**

```

1 USE classicmodels;
2 SELECT *
3 FROM customers
4 WHERE contactFirstName REGEXP 'b[ga]'
5 ORDER BY "new_credit" DESC;
  
```

**Results**

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: |

customerNumber	customerName	contactLastName	contactFirstName	phone	addressLine1	addressLine2	city	state	postalCode	country	salesRepEmployeeNumber	creditLimit
101	BAER	BAER	JOHN	505.535.1234	14725 State Street		Portland	OR	97201	USA	1360	10000

Schema: classicmodels