

Pattern Matching

Methods

1. LIKE statements
2. REGEX



LIKE WILDCARDS

The MySQL LIKE condition allows you to perform pattern matching using Wildcards.

Wildcard	Explanation
%	Allows you to match any string of any length (including zero length)
_	Allows you to match on a single character

LIKE Wildcards

A% means starts with A like ABC or ABCDE

%A means anything that ends with A

A%B means starts with A but ends with B

AB_C means string starts with AB, then there is one character, then there is C



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LIKE

The MySQL LIKE condition allows you to perform pattern matching using Wildcards.

Example

```
SELECT * FROM customer_table  
WHERE first_name LIKE 'Jo%';
```

```
SELECT * FROM customer_table  
WHERE first_name LIKE '%od%';
```

```
SELECT first_name, last_name FROM customer_table  
WHERE first_name LIKE 'Jas_n';
```

```
SELECT first_name, last_name FROM customer_table  
WHERE last_name NOT LIKE 'J%';
```

```
SELECT * FROM customer_table WHERE last_name LIKE 'G\%'
```



REGEX

Regular Expressions help search data matching complex criteria.

Syntax

SELECT statements... WHERE fieldname REGEXP 'pattern';



REGEX Metacharacters

Metacharacters allow us to fine tune our pattern search results using regular expressions.

REGEX Metacharacters

Char	Explanation
	Denotes alternation (either of two alternatives).
*	Denotes repetition of the previous item zero or more times
+	Denotes repetition of the previous item one or more times.
?	Denotes repetition of the previous item zero or one time.
{m}	denotes repetition of the previous item exactly m times.
{m,n}	denotes repetition of the previous item at least m and not more than n times
^,\$	^ denotes start of the string, \$ denotes end of the string
[chars]	a bracket expression, matching any one of the chars



REGEX

Regular Expressions help search data matching complex criteria.

Example

```
SELECT * FROM customer
WHERE customer_name REGEXP '^a+[a-z\\s]+$'
```

```
SELECT * FROM customer
WHERE customer_name REGEXP '^(a|b|c|d)+[a-z\\s]+$'
```

```
SELECT * FROM customer
WHERE customer_name REGEXP '^(a|b|c|d)[a-z]{3}\\s[a-z]{4}$' ;
```

```
SELECT * FROM users
WHERE name REGEXP '[a-z0-9\\.\\-\\_]+@[a-z0-9\\-]+\\. [a-z]{2,5}'
```

