



## **Queries and Updates**

## Queries and What They Match

{a: 10}	Docs where ${f a}$ is ${f 10}$ , or an array containing the value ${f 10}$ .
{a: 10, b: "hello"}	Docs where <b>a</b> is <b>10</b> and <b>b</b> is <b>"hello".</b>
{a: {\$gt: 10}}	Docs where a is greater than 10. Also available: \$lt (<), \$gte (>=), \$lte (<=), and \$ne (!=).
{a: {\$in: [10, "hello"]}}	Docs where <b>a</b> is either <b>10</b> or <b>"hello".</b>
{a: {\$all: [10, "hello"]}}	Docs where <b>a</b> is an array containing both <b>10</b> and <b>"hello".</b>
{"a.b": 10}	Docs where ${f a}$ is an embedded document with ${f b}$ equal to ${f 10}$ .
{a: {\$elemMatch: {b: 1, c: 2}}}	Docs where ${\bf a}$ is an array that contains an element with both ${\bf b}$ equal to ${\bf 1}$ and ${\bf c}$ equal to ${\bf 2}$ .
{\$or: [{a: 1}, {b: 2}]}	Docs where <b>a</b> is <b>1</b> or <b>b</b> is <b>2</b> .
{a: /^m/}	Docs where <b>a</b> begins with the letter <b>m</b> .
{a: {\$mod: [10, 1]}}	Docs where <b>a</b> mod <b>10</b> is <b>1</b> .
{a: {\$type: 2}}	Docs where <b>a</b> is a string (see bsonspec.org for more).

The following queries cannot use indexes as of MongoDB v2.0. These query forms should normally be accompanied by at least one other query term which does use an index:

{a: {\$nin: [10, "hello"]}}	Docs where <b>a</b> is anything but <b>10</b> or <b>"hello"</b> .
{a: {\$size: 3}}	Docs where <b>a</b> is an array with exactly 3 elements.
{a: {\$exists: true}}	Docs containing an <b>a</b> field.
{a: /foo.*bar/}	Docs where <b>a</b> matches the regular expression <b>foo.*bar</b> .
{a: {\$not: {\$type: 2}}}	Docs where <b>a</b> is not a string. <b>\$not</b> negates any of the other query operators.

## **Update Modifiers**

{\$inc: {a: 2}}	Increment <b>a</b> by <b>2.</b>
{\$set: {a: 5}}	Set <b>a</b> to the value <b>5</b> .
{\$unset: {a: 1}}	Delete the <b>a</b> key.
{\$push: {a: 1}}	Append the value <b>1</b> to the array <b>a</b> .
{\$push: {a: {\$each: [1, 2]}}}	Append both ${f 1}$ and ${f 2}$ to the array ${f a}$ .
{\$addToSet: {a: 1}}	Append the value $\boldsymbol{1}$ to the array $\boldsymbol{a}$ (if the value doesn't already exist).
{\$addToSet: {a: {\$each: [1, 2]}}}	Append both ${\bf 1}$ and ${\bf 2}$ to the array ${\bf a}$ (if they don't already exist).
{\$pop: {a: 1}}	Remove the last element from the array <b>a</b> .
{\$pop: {a: -1}}	Remove the first element from the array $oldsymbol{a}$ .
{\$pull: {a: 5}}	Remove all occurrences of <b>5</b> from the array <b>a</b> .
{\$pullAll: {a: [5, 6]}}	Remove all occurrences of <b>5</b> or <b>6</b> from the array <b>a</b> .

