

# QBFunction

## Property Summary

QBFunction	<b>abs</b>	Create abs(column) expression
QBSort	<b>asc</b>	Create an ascending sort expression
QBAggregate	<b>avg</b>	Create an aggregate expression.
QBFunction	<b>bit_length</b>	Create bit_length(column) expression
QBFunction	<b>ceil</b>	Create ceil(column) expression
QBAggregate	<b>count</b>	Create an aggregate expression.
QBFunction	<b>day</b>	Extract day from date
QBSort	<b>desc</b>	Create an descending sort expression
QBFunction	<b>floor</b>	Create floor(column) expression
QBFunction	<b>hour</b>	Extract hour from date
QCCondition	<b>isNull</b>	Compare column with null.
QBFunction	<b>len</b>	Create length(column) expression
QBFunction	<b>lower</b>	Create lower(column) expression
QBAggregate	<b>max</b>	Create an aggregate expression.
QBAggregate	<b>min</b>	Create an aggregate expression.
QBFunction	<b>minute</b>	Extract minute from date
QBFunction	<b>month</b>	Extract month from date
QCColumn	<b>not</b>	Create a negated condition.
QBTableClause	<b>parent</b>	Get query builder parent table clause, this may be a query or a join clause.
QBSelect	<b>root</b>	Get query builder parent.
QBFunction	<b>round</b>	Create round(column) expression
QBFunction	<b>second</b>	Extract second from date
QBFunction	<b>sqrt</b>	Create sqrt(column) expression
QBAggregate	<b>sum</b>	Create an aggregate expression.
QBFunction	<b>trim</b>	Create trim(column) expression
QBFunction	<b>upper</b>	Create upper(column) expression
QBFunction	<b>year</b>	Extract year from date

## Method Summary

QCCondition	<b>between</b> (value1, value2)	Compare column to a range of 2 values or other columns.
QBFunction	<b>cast</b> (type)	Create cast(column, type) expression
QBFunction	<b>concat</b> (arg)	Concatenates with value

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QBFunction	<code>divide(arg)</code>
	Divide by value
QBCondition	<code>eq(value)</code>
	Compare column with a value or another column.
QBCondition	<code>ge(value)</code>
	Compare column with a value or another column.
QBCondition	<code>gt(value)</code>
	Compare column with a value or another column.
QBCondition	<code>isin(query)</code>
	Compare column with subquery result.
QBCondition	<code>isin(values)</code>
	Compare column with values.
QBCondition	<code>le(value)</code>
	Compare column with a value or another column.
QBCondition	<code>like(pattern)</code>
	Compare column with a value or another column.
QBCondition	<code>like(pattern, escape)</code>
	Compare column with a value or another column.
QBFunction	<code>locate(arg)</code>
	Create locate(arg) expression
QBFunction	<code>locate(arg, start)</code>
	Create locate(arg, start) expression
QBCondition	<code>lt(value)</code>
	Compare column with a value or another column.
QBFunction	<code>minus(arg)</code>
	Subtract value
QBFunction	<code>mod(arg)</code>
	Create mod(arg) expression
QBFunction	<code>multiply(arg)</code>
	Multiply with value
QBFunction	<code>nullif(arg)</code>
	Create nullif(arg) expression
QBFunction	<code>plus(arg)</code>
	Add up value
QBFunction	<code>substring(pos)</code>
	Create substring(pos) expression
QBFunction	<code>substring(pos, len)</code>
	Create substring(pos, len) expression

## Property Details

### abs

Create abs(column) expression

#### Returns

QBFunction

#### Sample

```
query.result.add(query.columns.custname.abs)
```

### asc

Create an ascending sort expression

#### Returns

QBSort

#### Sample

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.sort
.add(query.joins.orders_to_order_details.columns.quantity.asc)
.add(query.columns.companyid)
foundset.loadRecords(query)
```

### avg

Create an aggregate expression.

**Returns**[QBAggregate](#)**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
.root.having.add(query.joins.orders_to_order_details.columns.quantity.avg.eq(1))
foundset.loadRecords(query)
```

**bit\_length**

Create bit\_length(column) expression

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.custname.bit_length)
```

**ceil**

Create ceil(column) expression

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.mycol.ceil)
```

**count**

Create an aggregate expression.

**Returns**[QBAggregate](#)**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
.root.having.add(query.joins.orders_to_order_details.columns.quantity.count.eq(0))
foundset.loadRecords(query)
```

**day**

Extract day from date

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.mydatecol.day)
```

**desc**

Create an descending sort expression

**Returns**[QBSort](#)

**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.sort
.add(query.joins.orders_to_order_details.columns.quantity.desc)
.add(query.columns.companyid)
foundset.loadRecords(query)
```

**floor**

Create floor(column) expression

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.mycol.floor)
```

**hour**

Extract hour from date

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.mydatecol.hour)
```

**isNull**

Compare column with null.

**Returns**

[QBCondition](#)

**Sample**

```
query.where.add(query.columns.flag.isNull)
```

**len**

Create length(column) expression

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.custname.len)
```

**lower**

Create lower(column) expression

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.custname.lower)
```

**max**

Create an aggregate expression.

**Returns**[QBAggregate](#)**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
.root.having.add(query.joins.orders_to_order_details.columns.quantity.count.max(10))
foundset.loadRecords(query)
```

**min**

Create an aggregate expression.

**Returns**[QBAggregate](#)**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
.root.having.add(query.joins.orders_to_order_details.columns.quantity.count.min(10))
foundset.loadRecords(query)
```

**minute**

Extract minute from date

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.mydatecol.minute)
```

**month**

Extract month from date

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.mydatecol.month)
```

**not**

Create a negated condition.

**Returns**[QBColumn](#)**Sample**

```
query.where.add(query.columns.flag.not.eq(1))
```

**parent**

Get query builder parent table clause, this may be a query or a join clause.

**Returns**[QBTableClause](#)

**Sample**

```
/** @type {QBSelect<db:/example_data/person>} */
var query = databaseManager.createSelect('db:/example_data/person')
query.where.add(query.joins.person_to_parent.joins.person_to_parent.columns.name.eq('john'))
foundset.loadRecords(query)
```

**root**

Get query builder parent.

**Returns**

[QBSelect](#)

**Sample**

```
/** @type {QBSelect<db:/example_data/order_details>} */
var subquery = databaseManager.createSelect('db:/example_data/order_details')

/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.where.add(query
    .or
        .add(query.columns.order_id.not.isin([1, 2, 3]))
    .add(query.exists(
        subquery.where.add(subquery.columns.orderid.eq(query.columns.
order_id)).root
    )))
)

foundset.loadRecords(query)
```

**round**

Create round(column) expression

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.mycol.round)
```

**second**

Extract second from date

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.mydatecol.second)
```

**sqrt**

Create sqrt(column) expression

**Returns**

[QBFunction](#)

**Sample**

```
query.result.add(query.columns.custname.sqrt)
```

**sum**

Create an aggregate expression.

**Returns**[QBAggregate](#)**Sample**

```
/** @type {QBSelect<db:/example_data/orders>} */
var query = databaseManager.createSelect('db:/example_data/orders')
query.groupBy.addPk() // have to group by on pk when using having-conditions in (foundset) pk queries
.root.having.add(query.joins.orders_to_order_details.columns.quantity.sum(10))
foundset.loadRecords(query)
```

**trim**

Create trim(column) expression

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.custname.trim)
```

**upper**

Create upper(column) expression

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.custname.upper)
```

**year**

Extract year from date

**Returns**[QBFunction](#)**Sample**

```
query.result.add(query.columns.mydatecol.year)
```

**Method Details****between**[QBCondition](#) **between** (value1, value2)

Compare column to a range of 2 values or other columns.

**Parameters**{Object} value1  
{Object} value2**Returns**[QBCondition](#)**Sample**

```
query.where.add(query.columns.flag.between(0, 5))
```

**cast**[QBFunction](#) **cast** (type)

Create cast(column, type) expression

**Parameters**

{String} type - string type, see QUERY\_COLUMN\_TYPES

**Returns**

QBFuction

**Sample**

```
query.result.add(query.columns.mycol.cast(QUERY_COLUMN_TYPES.TYPE_INTEGER))
```

**concat**

QBFunction concat (arg)

Concatenname with value

**Parameters**

{Object} arg - valeu to concatenate with

**Returns**

QBFuction

**Sample**

```
query.result.add(query.columns.firstname.concat(' ').concat(query.columns.lastname))
```

**divide**

QBFunction divide (arg)

Divide by value

**Parameters**

{Object} arg - nr to divide by

**Returns**

QBFuction

**Sample**

```
query.result.add(query.columns.mycol.divide(2))
```

**eq**

QBCondition eq (value)

Compare column with a value or another column.

Operator: equals

**Parameters**

{Object} value

**Returns**

QBCondition

**Sample**

```
query.where.add(query.columns.flag.eq(1))
```

**ge**

QBCondition ge (value)

Compare column with a value or another column.

Operator: greaterThanOrEqual

**Parameters**

{Object} value

**Returns**

QBCondition

**Sample**

```
query.where.add(query.columns.flag.ge(2))
```

**gt****QBCondition** **gt** (value)

Compare column with a value or another column.

Operator: greaterThan

**Parameters**

{Object} value

**Returns****QBCondition****Sample**

```
query.where.add(query.columns.flag.gt(0))
```

**isin****QBCondition** **isin** (query)

Compare column with subquery result.

**Parameters**

{QBPart} query - subquery

**Returns****QBCondition****Sample**

```
query.where.add(query.columns.flag.isin(query2))
```

**isin****QBCondition** **isin** (values)

Compare column with values.

**Parameters**

{Object[]} values - array of values

**Returns****QBCondition****Sample**

```
query.where.add(query.columns.flag.isin([1, 5, 99]))
```

**le****QBCondition** **le** (value)

Compare column with a value or another column.

Operator: lessThanOrEqual

**Parameters**

{Object} value

**Returns****QBCondition****Sample**

```
query.where.add(query.columns.flag.le(2))
```

**like****QBCondition** **like** (pattern)

Compare column with a value or another column.  
Operator: like

#### Parameters

{String} pattern - the string value of the pattern

#### Returns

QBCondition

#### Sample

```
query.where.add(query.columns.companyname.like('Serv%'))
```

### like

QBCondition like (pattern, escape)

Compare column with a value or another column.  
Operator: like, with escape character

#### Parameters

{String} pattern - the string value of the pattern

{String} escape - the escape char

#### Returns

QBCondition

#### Sample

```
query.where.add(query.columns.companyname.like('X_%', '_'))
```

### locate

QBFunction locate (arg)

Create locate(arg) expression

#### Parameters

{Object} arg - string to locate

#### Returns

QBFunction

#### Sample

```
query.result.add(query.columns.mycol.locate('sample'))
```

### locate

QBFunction locate (arg, start)

Create locate(arg, start) expression

#### Parameters

{Object} arg - string to locate

{Number} start - start pos

#### Returns

QBFunction

#### Sample

```
query.result.add(query.columns.mycol.locate('sample', 5))
```

### lt

QBCondition lt (value)

Compare column with a value or another column.  
Operator: lessThan

#### Parameters

{Object} value

#### Returns

QBCondition

**Sample**

```
query.where.add(query.columns.flag.lt(99))
```

**minus****QBFunction** **minus** (arg)

Subtract value

**Parameters**

{Object} arg - nr to subtract

**Returns****QBFunction****Sample**

```
query.result.add(query.columns.mycol.minus(2))
```

**mod****QBFunction** **mod** (arg)

Create mod(arg) expression

**Parameters**

{Object} arg - mod arg

**Returns****QBFunction****Sample**

```
query.result.add(query.columns.mycol.mod(2))
```

**multiply****QBFunction** **multiply** (arg)

Multiply with value

**Parameters**

{Object} arg - nr to multiply with

**Returns****QBFunction****Sample**

```
query.result.add(query.columns.mycol.multiply(2))
```

**nullif****QBFunction** **nullif** (arg)

Create nullif(arg) expression

**Parameters**

{Object} arg - object to compare

**Returns****QBFunction****Sample**

```
query.result.add(query.columns.mycol.nullif('none'))
```

**plus****QBFunction** **plus** (arg)

Add up value

**Parameters**

{Object} arg - nr to add

**Returns**

QBFFunction

**Sample**

```
query.result.add(query.columns.mycol.plus(2))
```

**substring**QBFFunction **substring** (pos)

Create substring(pos) expression

**Parameters**

{Number} pos

**Returns**

QBFFunction

**Sample**

```
query.result.add(query.columns.mycol.substring(3))
```

**substring**QBFFunction **substring** (pos, len)

Create substring(pos, len) expression

**Parameters**

{Number} pos

{Number} len

**Returns**

QBFFunction

**Sample**

```
query.result.add(query.columns.mycol.substring(3, 2))
```