

Retrieve



Content

- SELECT
- WHERE
- DISTINCT, ORDER, LIMIT



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SELECT

Syntax

SELECT *attributename01, attributename02, ...* **FROM** *tablename;*

Example

```
-- Get the names of all clients  
SELECT FirstName, LastName FROM Clients
```

SELECT ALL

Syntax

SELECT * **FROM** *tablename*;

Example

```
-- Get all data  
SELECT * FROM Clients
```

Content

- SELECT
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WHERE

Syntax

SELECT *attribute01, attribute02, ...* **FROM** *tablename* **WHERE** *condition*;

Example

```
-- Only select clients older than 30 years  
SELECT * FROM Clients  
WHERE Age>30;
```

Operator	Function	Operator	Function	Operator	Function
=	equal	<	smaller then	<=	smaller or equal
<> or !=	not equal	>	bigger then	>=	bigger or equal

WHERE

AND / OR / NOT

Syntax

SELECT *attribute01, attribute02, ...* **FROM** *tablename*
WHERE *condition01 AND condition02 OR NOT condition03;*

Example

```
/* Only select clients older than 30 years  
   AND younger than 50 years  
   OR if their first name is NOT Thomas */  
SELECT * FROM Clients  
WHERE Age>30 AND Age<50 OR NOT FirstName='Thomas';
```


WHERE

LIKE

Syntax

```
SELECT attribute01, attribute02, ... FROM tablename  
WHERE condition LIKE pattern;
```

Example

```
-- Select clients whose last name ends with the pattern man  
SELECT * FROM Clients  
WHERE LastName LIKE '%man';
```

Placeholder	Representation
%	The percent sign represents zero, one, or multiple characters
_	The underscore represents a single character

WHERE

IN (shorthand for multiple OR conditions)

Syntax

SELECT *attribute01, attribute02, ...* **FROM** *tablename*
WHERE *attributeON* **IN** (*value01, value02, ...*);

Example

```
-- Get all clients in the cities NY, LA, and Chicago
SELECT * FROM Clients
WHERE City IN ('New York', 'Los Angeles', 'Chicago');
```

WHERE

BETWEEN (values within a given range)

Syntax

```
SELECT attribute01, attribute02, ... FROM tablename  
WHERE attribute0N BETWEEN value01 AND value02;
```

Example

```
-- Get all clients who are between 30 and 50 years old  
SELECT * FROM Clients  
WHERE Age BETWEEN 30 AND 50;
```

WHERE

NULL (if there is no value)

Syntax

SELECT *attribute01, attribute02, ...* **FROM** *tablename*
WHERE *attributeON IS NULL;*

Example

```
-- Get all clients who have a first name stored  
SELECT * FROM Clients  
WHERE FirstName IS NOT NULL;
```

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DISTINCT

Return only distinct (different) values

Syntax

SELECT DISTINCT *attribute01, attribute02, ...* **FROM** *tablename* **WHERE** *condition*;

Example

```
-- Select all different cities  
SELECT DISTINCT City FROM Clients;
```

ORDER

Sort the result-set in ascending or descending order

Syntax

```
SELECT DISTINCT attribute01, attribute02, ... FROM tablename  
ORDER BY attribute01, attribute02, ... ASC|DESC;
```

Example

```
-- Select clients and sort them by their age (oldest first)  
SELECT FirstName, LastName, Age FROM Clients  
ORDER BY Age DESC;
```

LIMIT

Limit the number of records

Syntax

SELECT DISTINCT *attribute01, attribute02, ...* **FROM** *tablename*
LIMIT *number*;

Example

```
-- Select the first ten clients  
SELECT * FROM Clients  
LIMIT 10;
```