

Queries

SELECT Statement

The `SELECT *` statement returns all columns from the provided table in the result set. The given query will fetch all columns and records (rows) from the `movies` table.

```
SELECT *  
FROM movies;
```

AS Clause

Columns or tables can be aliased using the `AS` clause. This allows columns or tables to be specifically renamed in the returned result set. The given query will return a result set with the column for `name` renamed to `movie_title`.

```
SELECT name AS 'movie_title'  
FROM movies;
```

DISTINCT Clause

Unique values of a column can be selected using a `DISTINCT` query. For a table `contact_details` having five rows in which the `city` column contains Chicago, Madison, Boston, Madison, and Denver, the given query would return:

- Chicago
- Madison
- Boston
- Denver

```
SELECT DISTINCT city  
FROM contact_details;
```

WHERE Clause

The `WHERE` clause is used to filter records (rows) that match a certain condition. The given query will select all records where the `pub_year` equals `2017`.

```
SELECT title  
FROM library  
WHERE pub_year = 2017;
```

LIKE Operator

The `LIKE` operator can be used inside of a `WHERE` clause to match a specified pattern. The given query will match any movie that begins with `Star` in its title.

```
SELECT name  
FROM movies  
WHERE name LIKE 'Star%';
```

_ Wildcard

The `_` wildcard can be used in a `LIKE` operator pattern to match any single unspecified character. The given query will match any movie which begins with a single character, followed by `ove`.

```
SELECT name  
FROM movies  
WHERE name LIKE '_ove';
```

% Wildcard

The `%` wildcard can be used in a `LIKE` operator pattern to match zero or more unspecified character(s). The given query will match any movie that begins with `The`, followed by zero or more of any characters.

```
SELECT name  
FROM movies  
WHERE name LIKE 'The%';
```

NULL Values

Column values can be `NULL`, or have no value. These records can be matched (or not matched) using the `IS NULL` and `IS NOT NULL` operators in combination with the `WHERE` clause. The given query will match all addresses where the address has a value or is not `NULL`.

BETWEEN Operator

The `BETWEEN` operator can be used to filter by a range of values. The range of values can be text, numbers, or date data. The given query will match any movie made between the years 1980 and 1990, inclusive.

AND Operator

The `AND` operator allows multiple conditions to be combined. Records must match both conditions that are joined by `AND` to be included in the result set. The given query will match any car that is blue and made after 2014.

OR Operator

The `OR` operator allows multiple conditions to be combined. Records matching either condition joined by the `OR` are included in the result set. The given query will match customers whose state is either `'CA'` or `'NY'`.

ORDER BY Clause

The `ORDER BY` clause can be used to sort the result set by a particular column either alphabetically or numerically. It can be ordered in two ways:

- `DESC` is a keyword used to sort the results in descending order.
- `ASC` is a keyword used to sort the results in ascending order (default).

LIMIT Clause

The `LIMIT` clause is used to narrow, or limit, a result set to the specified number of rows. The given query will limit the result set to 5 rows.

```
SELECT address
FROM records
WHERE address IS NOT NULL;
```

```
SELECT *
FROM movies
WHERE year BETWEEN 1980 AND 1990;
```

```
SELECT model
FROM cars
WHERE color = 'blue'
AND year > 2014;
```

```
SELECT name
FROM customers
WHERE state = 'CA'
OR state = 'NY';
```

```
SELECT *
FROM contacts
ORDER BY birth_date DESC;
```

```
SELECT *
FROM movies
LIMIT 5;
```