

Views

Views in SQL are a kind of virtual table. A view also has rows and columns like tables, but a view doesn't store data on the disk like a table. View defines a customized query that retrieves data from one or more tables, and represents the data as if it was coming from a single source.

We can create a view by selecting fields from one or more tables present in the database. A View can either have all the rows of a table or specific rows based on certain conditions.

```
CREATE TABLE departments (  
    department_id INT PRIMARY KEY,  
    department_name VARCHAR(50)  
);
```

```
CREATE TABLE employees (  
    employee_id INT PRIMARY KEY,  
    employee_name VARCHAR(50),  
    department_id INT,  
    FOREIGN KEY (department_id) REFERENCES departments(department_id)  
);
```

```
INSERT INTO departments (department_id, department_name) VALUES  
(1, 'Engineering'),  
(2, 'Marketing'),  
(3, 'Finance');
```

```
INSERT INTO employees (employee_id, employee_name, department_id) VALUES  
(101, 'John Doe', 1),  
(102, 'Jane Smith', 1),  
(103, 'Michael Johnson', 2),  
(104, 'Emily Davis', 2),  
(105, 'David Brown', 3);
```

```
CREATE VIEW employee_department_view AS  
SELECT e.employee_id, e.employee_name, d.department_name  
FROM employees e  
JOIN departments d ON e.department_id = d.department_id;
```

```
SELECT * FROM employee_department_view;  
DROP VIEW employee_department_view;
```