

SQL Operators

- "=" (equal to)
- ">" (greater than)
- ">=" (greater than equal to)
- "<" (less than)
- "<=" (less than equal to)
- "!=" (not equal to)
- Where (filter the records)
- AND
- OR
- NOT

- Between
- Is null
- In
- Distinct
- Avg
- Count
- Max
- Min
- Sum

```
1 • create database employees;
2 • use employees;
3
4 -- • "=" (equal to)
5 -- • ">" (greater than)
6 -- • ">=" (greater than equal to)
7 -- • "<" (less than)
8 -- • "<=" (less than equal to)
9 -- • "!=" (not equal to)
10 -- • Where (filter the records)
11 -- • AND
12 -- • OR
13 -- • NOT
14 -- • Between
15 -- • Is null
16 -- • In
17 -- • Distinct
```

```
18 -- • Avg
19 -- • Count
20 -- • Max
21 -- • Min
22 -- • Sum
23
24 -- 1. = (Equal To)
25 -- Select employees from the IT department.
26 • select * from employees_sample
27 where department = 'IT';
28
29
30
31
32
33
34
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

| | id | name | age | department | salary | bonus |
|---|----|-------|-----|------------|--------|--------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |

employees_sample20.sql



```
38  -- 2. > (Greater Than)
39  -- Select employees with salary more than 50000.
40  • select * from employees_sample
41  where salary > 50000;
42
43
44
45
46
47
48
49
50
51
52
53
54
```

Result Grid Filter Rows: Export: Wrap Cell Content:

| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 2 | Priya | 34 | HR | 60000 | |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |

Limit to 5000 rows

```
55  -- 3. >= (Greater Than or Equal To)
56  -- Select employees with age 30 or above.
57 • SELECT * FROM employees_sample
58 WHERE age >= 30;
```

59
60
61
62
63
64
65
66

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 2 | Priya | 34 | HR | 60000 | |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |



```
68  -- 4. < (Less Than)
69  -- Select employees younger than 30.
70 • SELECT * FROM employees_sample
71 WHERE age < 30;
72
73
74
75
76
77
78
79
```





Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| | id | name | age | department | salary | bonus |
|---|----|-------|-----|------------|--------|--------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |


```
81  -- 5. <= (Less Than or Equal To)
82  -- Select employees earning 50000 or less.
83 • SELECT * FROM employees_sample
84 WHERE age <= 50000;
85
86
87
--
```




| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 2 | Priya | 34 | HR | 60000 | |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |

```
92
93  -- 6. != (Not Equal To)
94  -- Select employees not from the HR department.
95 • SELECT * FROM employees_sample
96 WHERE department != 'HR';
97
98
--
```

Result Grid   Filter Rows: | Export:  | Wrap Cell Content: 



| | id | name | age | department | salary | bonus |
|---|----|-------|-----|------------|--------|---------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |

```
102  -- 7. WHERE (Filter Records)
103  -- Used to filter records based on conditions.
104 • SELECT * FROM employees_sample
105 WHERE bonus is not null;
106
107
108
---
```

Result Grid   Filter Rows: | Export:  | Wrap Cell Content: 

| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 2 | Priya | 34 | HR | 60000 | |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |

```
111 -- 8. AND
112 -- Select IT department employees older than 25.
113 • SELECT * FROM employees_sample
114 WHERE department='IT' AND age > 25;
115
116
117
```

Result Grid |  Filter Rows: | Export:  | Wrap Cell Content: 




| | id | name | age | department | salary | bonus |
|---|----|------|-----|------------|--------|--------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |

```
119 -- 9. OR
120 -- Select employees in IT department or age less than 30.
121 • SELECT * FROM employees_sample
122 WHERE department = 'IT' OR age < 30;
123
124
125
---
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 





| | id | name | age | department | salary | bonus |
|---|----|-------|-----|------------|--------|--------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |

```
129 -- 10. NOT
130 -- Select employees who are not from IT department.
131 • SELECT * FROM employees_sample
132 WHERE NOT department = 'IT';
133
134
135
---
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 





| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 2 | Priya | 34 | HR | 60000 | |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |

```
137 -- 11. BETWEEN
138 -- Select employees with salary between 45000 and 70000.
139 • SELECT * FROM employees_sample
140 WHERE salary BETWEEN 45000 AND 70000;
141
142
143
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 





| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|--------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 2 | Priya | 34 | HR | 60000 | |
| | 5 | Rakesh | 30 | HR | 55000 | |

```
145 -- 12. IS NULL
146 -- Find employees whose bonus is not given (NULL).
147 • SELECT * FROM employees_sample
148 WHERE bonus is not null;
149
150
151
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 2 | Priya | 34 | HR | 60000 | |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |


```
153 -- 13. IN
154 -- Select employees from HR or Finance departments.
155 • SELECT * FROM employees_sample
156 WHERE department IN ('HR','Finance');
157
158
159
---
```

Result Grid   Filter Rows: | Export:  | Wrap Cell Content: 

| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 2 | Priya | 34 | HR | 60000 | |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |

```
161
162  -- 14. DISTINCT
163  -- Find all unique departments.
164 • SELECT DISTINCT * FROM employees_sample;
165
166
167
```

Result Grid



Filter Rows:

Export:



Wrap Cell Content:



| | id | name | age | department | salary | bonus |
|---|----|--------|-----|------------|--------|---------|
| ▶ | 1 | Raj | 28 | IT | 50000 | 5000.0 |
| | 2 | Priya | 34 | HR | 60000 | |
| | 3 | Arjun | 24 | IT | 40000 | 3000.0 |
| | 4 | Neha | 40 | Finance | 80000 | 10000.0 |
| | 5 | Rakesh | 30 | HR | 55000 | |



```
171  -- 15. AVG() (Average)
172  -- Average salary of all employees.
173 • SELECT AVG(salary) as average_salary FROM employees_sample;
174
175
176
177
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

| | average_salary |
|--|----------------|
|--|----------------|

| | |
|---|------------|
| ▶ | 57000.0000 |
|---|------------|

```
179  -- 16. COUNT() (Count rows)
180  -- Total number of employees.
181 • SELECT COUNT(*) as Total_Employees FROM employees_sample;
182
183
184
185
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

| | Total_Employees |
|--|-----------------|
|--|-----------------|

| | |
|---|---|
| ▶ | 5 |
|---|---|