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

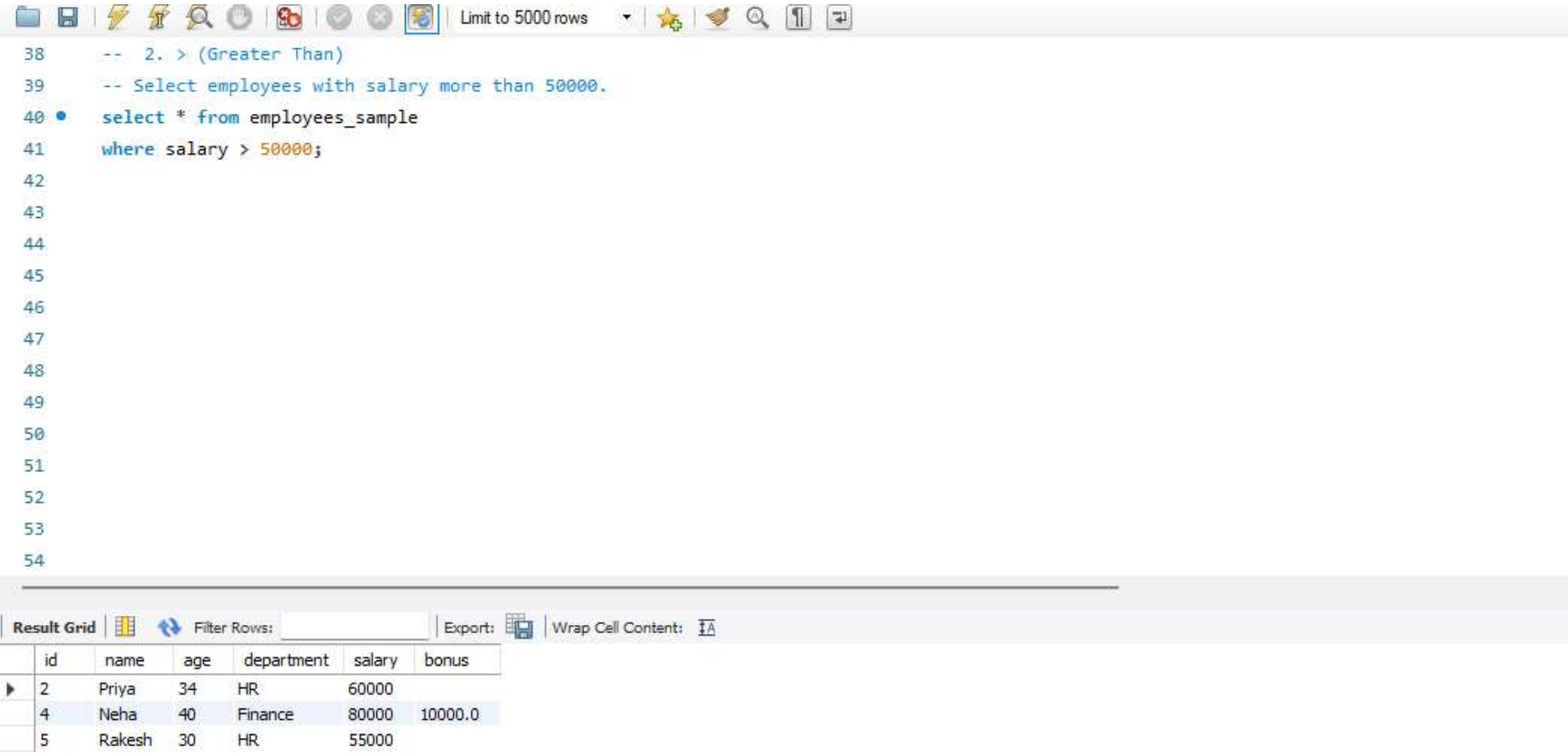
- Between
- Is null
- In
- Distinct
- Avg
- Count
- Max
- Min
- Sum

```sql
create database employees;
use employees;

-- • “=” (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
```

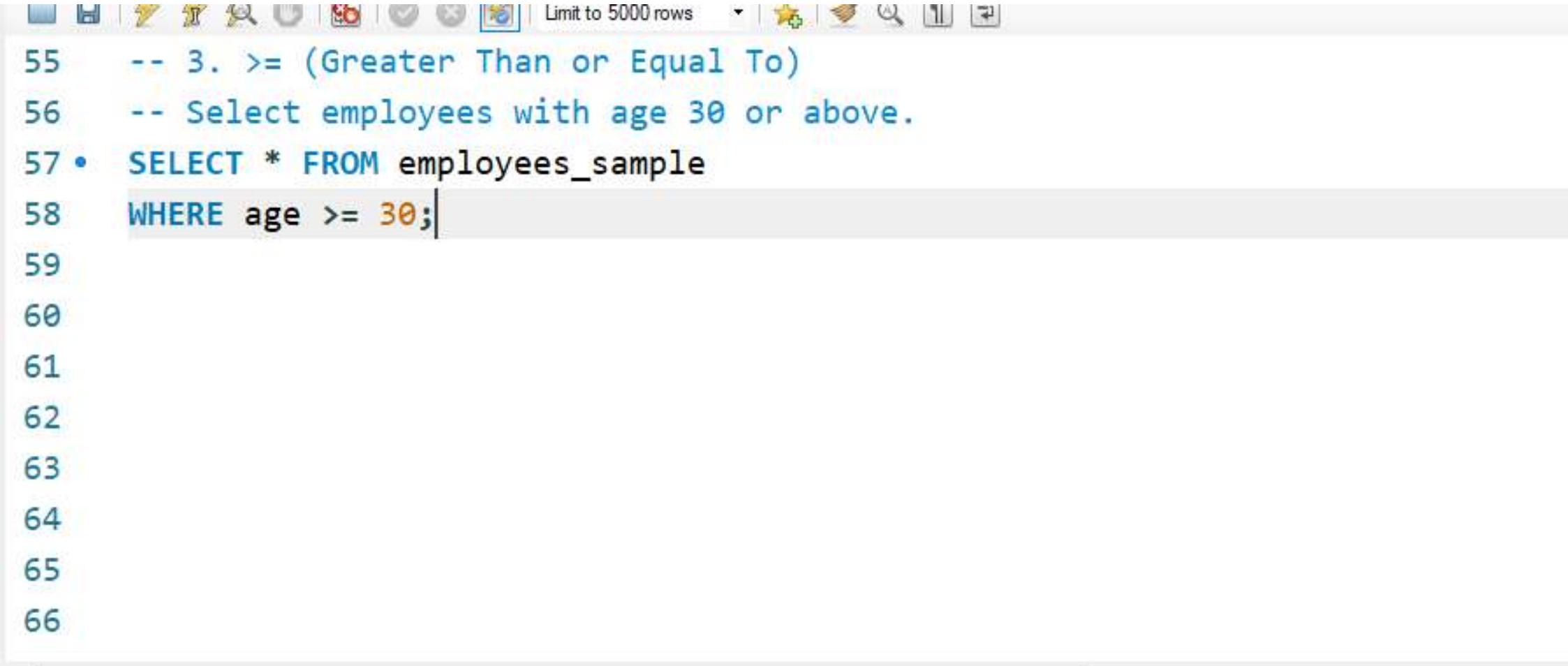
```sql
-- • Avg
-- • Count
-- • Max
-- • Min
-- • Sum

-- 1. = (Equal To)
-- Select employees from the IT department.
select * from employees_sample
where department = 'IT';
```

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

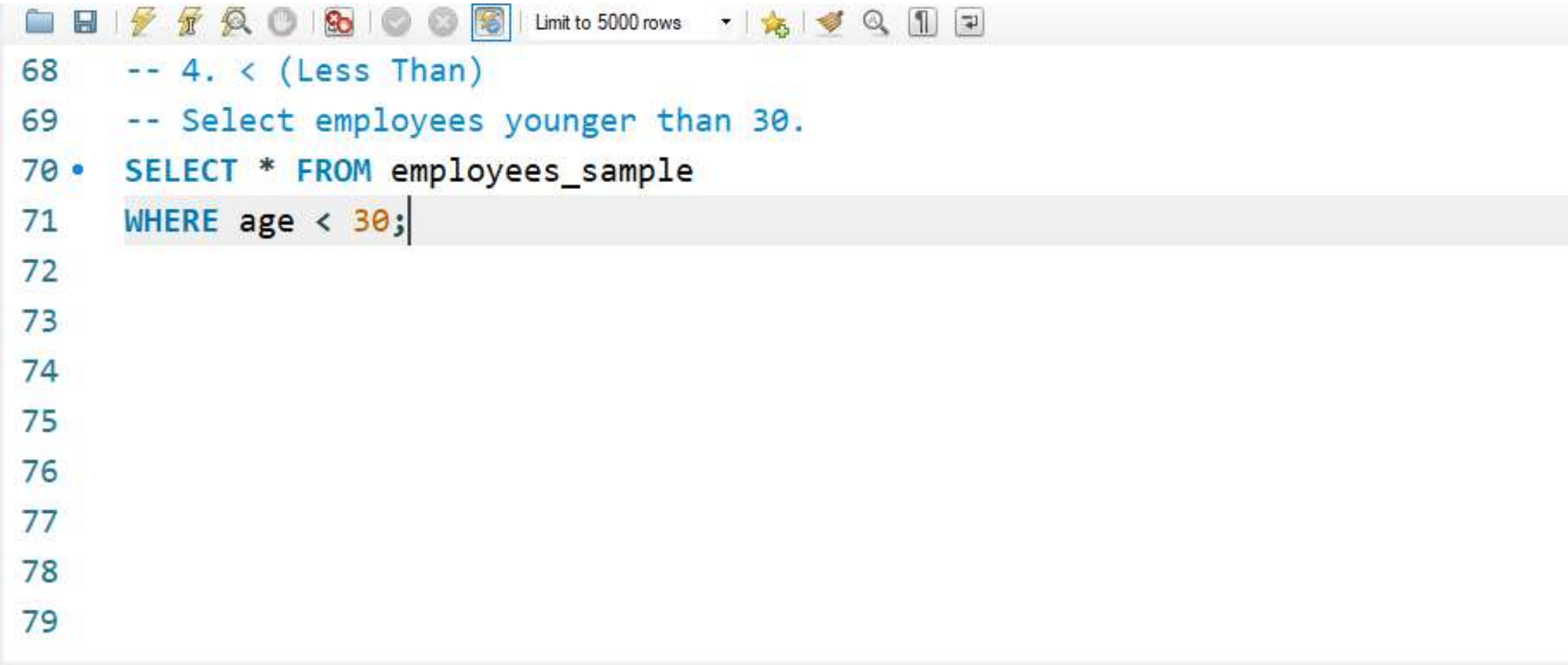


id	name	age	department	salary	bonus
2	Priya	34	HR	60000	
4	Neha	40	Finance	80000	10000.0
5	Rakesh	30	HR	55000	



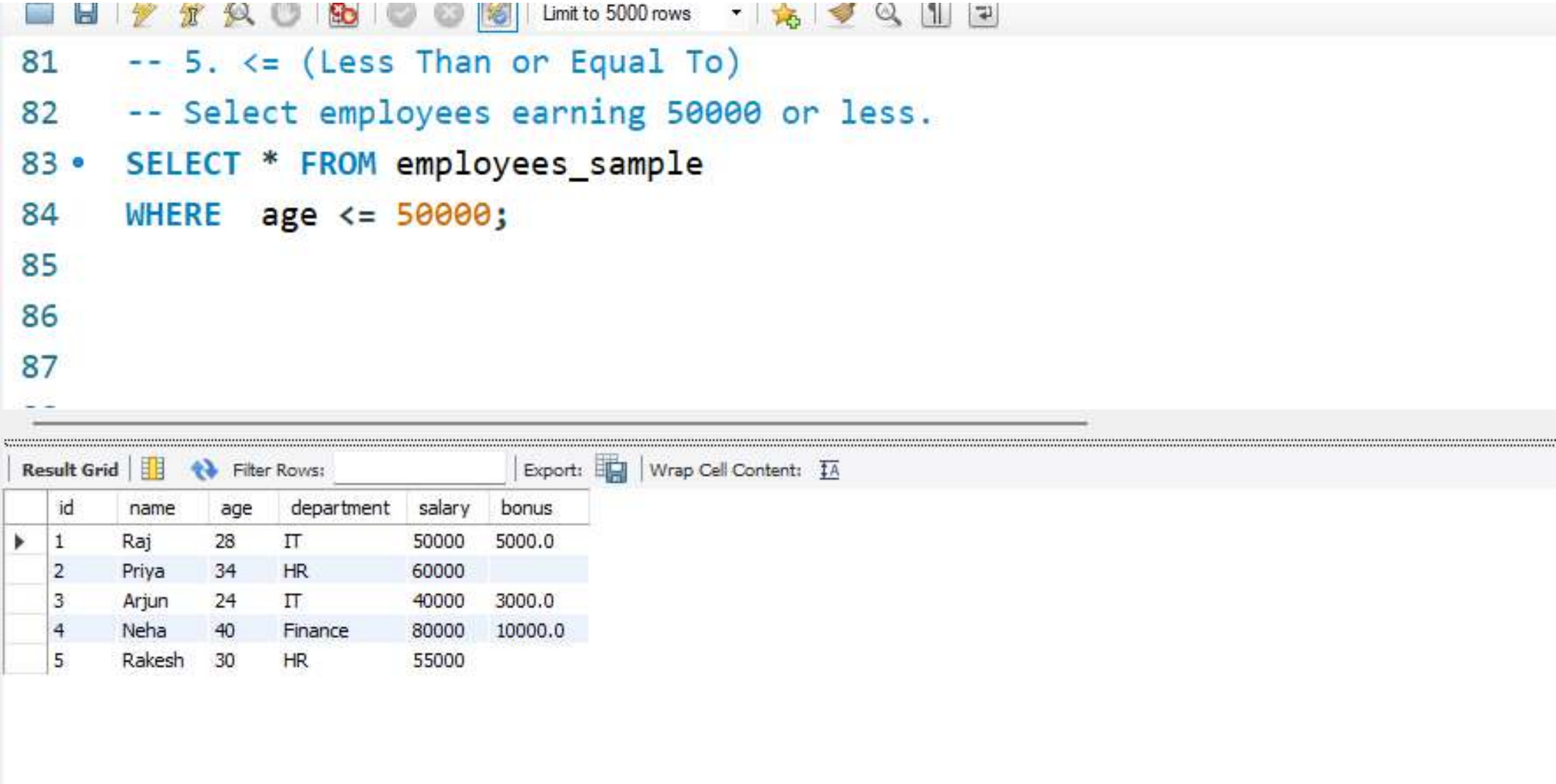
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

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



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


Limit to 5000 rows
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
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

```sql
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

```sql
--  7. WHERE (Filter Records)
-- Used to filter records based on conditions.
SELECT * FROM employees_sample
WHERE bonus is not null;
```

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	

```sql
--  8. AND
-- Select IT department employees older than 25.
SELECT * FROM employees_sample
WHERE department='IT' AND age > 25;
```

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

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

```sql
-- 9. OR
-- Select employees in IT department or age less than 30.
SELECT * FROM employees_sample
WHERE department = 'IT' OR age < 30;
```

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	

```sql
-- 11. BETWEEN
-- Select employees with salary between 45000 and 70000.
SELECT * FROM employees_sample
WHERE salary BETWEEN 45000 AND 70000;
```

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	

```sql
-- 12. IS NULL
-- Find employees whose bonus is not given (NULL).
SELECT * FROM employees_sample
WHERE bonus is not null;
```

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	

```sql
-- 13. IN
-- Select employees from HR or Finance departments.
SELECT * FROM employees_sample
WHERE department IN ('HR','Finance');
```

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	

```sql
-- 15. AVG() (Average)
-- Average salary of all employees.
SELECT AVG(salary) as average_salary FROM employees_sample;
```

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

average_salary
57000.0000

```sql
-- 16. COUNT() (Count rows)
-- Total number of employees.
SELECT COUNT(*) as Total_Employees FROM employees_sample;
```

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

Total_Employees
5