

## Inline Views

- Inline views are also referred to as subqueries in the FROM clause.
- You insert a subquery in the FROM clause just as if the subquery was a table name.
- Inline views are commonly used to simplify complex queries by removing join operations and condensing several queries into one.

- As shown in the example below, the FROM clause contains a SELECT statement that retrieves data much like any SELECT statement.
- The data returned by the subquery is given an alias (d), which is then used in conjunction with the main query to return selected columns from both query sources.

```
SELECT e.last_name, e.salary, e.department_id, d.maxsal
FROM employees e,
     (SELECT department_id, max(salary) maxsal
      FROM employees
      GROUP BY department_id) d
WHERE e.department_id= d.department_id
AND e.salary= d.maxsal;
```

## TOP-N-ANALYSIS

- Top-n-analysis is a SQL operation used to rank results.
- The use of top-n-analysis is useful when you want to retrieve the top 5 records, or top-n records, of a result set returned by a query.

```
SELECT ROWNUM AS "Longest employed", last_name, hire_date
FROM employees
WHERE ROWNUM <=5
ORDER BY hire_date
```

Longest employed	LAST_NAME	HIRE_DATE
1	King	17-Jun-1987
4	Whalen	17-Sep-1987
2	Kochhar	21-Sep-1989
3	De Haan	13-Jan-1993
5	Higgins	07-Jun-1994

## TOP-N-ANALYSIS

- The top-n-analysis query uses an inline view (a subquery) to return a result set.
- You can use ROWNUM in your query to assign a row number to the result set.
- The main query then uses ROWNUM to order the data and return the top five.

```
SELECT ROWNUM AS "Longest employed", last_name, hire_date
FROM (SELECT last_name, hire_date
      FROM employees
      ORDER BY hire_date)
WHERE ROWNUM <=5;
```

Longest employed	LAST_NAME	HIRE_DATE
1	King	17-Jun-1987
2	Whalen	17-Sep-1987
3	Kochhar	21-Sep-1989
4	Hunold	03-Jan-1990
5	Ernst	21-May-1991

- In the example above, the inline view first selects the list of last\_names and hire\_dates of the employees:

```
(SELECT last_name, hire_date FROM employees...
```

- Then the inline view orders the years from oldest to newest.  
...ORDER BY hire\_date)