

Program No:	4 5
Roll No :	1534
Title of Program :	Implement of Analytical queries
Objective :	- rollup, cube, rank, dense, rank, lead, lag, first, last

SOURCE CODE:

```
CREATE TABLE employee (
  emp_no NUMBER(10),
  dep_no NUMBER(10),
  emp_name VARCHAR(25),
  salary NUMBER(10),
  comm NUMBER(10),
  job VARCHAR(25),
  bdate DATE
);
```

```
INSERT INTO employee VALUES (101, 10, 'sanket', 22000, 10000, 'assistant', TO_DATE('1990-01-15',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (102, 10, 'josh', 22000, 2000, 'assistant', TO_DATE('1991-02-20',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (103, 20, 'hendry', 22000, 1000, 'CLERK', TO_DATE('1992-03-25',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (104, 70, 'sanket cha papa', 22000, 1000, 'manager', TO_DATE('1989-04-
30', 'YYYY-MM-DD'));
INSERT INTO employee VALUES (105, 10, 'abhay', 22000, 1000, 'assistant', TO_DATE('1993-05-05',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (106, 50, 'james', 22000, 5000, 'CLERK', TO_DATE('1988-06-10',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (107, 10, 'bond', 22000, 1000, 'CLERK', TO_DATE('1990-07-15',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (108, 10, 'hardik', 22000, 3000, 'assistant', TO_DATE('1994-08-20',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (109, 70, 'rohit', 22000, 1000, 'manager', TO_DATE('1987-09-25',
'YYYY-MM-DD'));
INSERT INTO employee VALUES (110, 90, 'rishab', 22000, 7000, 'CLERK', TO_DATE('1995-10-30',
'YYYY-MM-DD'));
```

OUTPUT:

```
SQL> INSERT INTO employee VALUES (107, 10, 'bond', 22000, 1000, 'CLERK', TO_DATE('1990-07-15', 'YYYY-MM-DD'));
1 row created.

SQL> INSERT INTO employee VALUES (108, 10, 'hardik', 22000, 3000, 'assistant', TO_DATE('1994-08-20', 'YYYY-MM-DD'));
1 row created.

SQL> INSERT INTO employee VALUES (109, 70, 'rohit', 22000, 1000, 'manager', TO_DATE('1987-09-25', 'YYYY-MM-DD'));
1 row created.

SQL> INSERT INTO employee VALUES (110, 90, 'rishab', 22000, 7000, 'CLERK', TO_DATE('1995-10-30', 'YYYY-MM-DD'));
1 row created.

SQL> |
```

```
9 );

Table created.
```

LEAD:

SOURCE CODE:

```
SELECT emp_no, bdate, LEAD(bdate, 1) OVER (ORDER BY bdate) AS "next" FROM employee;
```

OUTPUT:

```
SQL> SELECT emp_no, bdate, LEAD(bdate, 1) OVER (ORDER BY bdate) AS "next" FROM employee;
```

EMP_NO	BDATE	next
109	25-SEP-87	10-JUN-88
106	10-JUN-88	30-APR-89
104	30-APR-89	15-JAN-90
101	15-JAN-90	15-JUL-90
107	15-JUL-90	20-FEB-91
102	20-FEB-91	25-MAR-92
103	25-MAR-92	05-MAY-93
105	05-MAY-93	20-AUG-94
108	20-AUG-94	30-OCT-95
110	30-OCT-95	

10 rows selected.

```
SQL> |
```

LAG

SOURCE CODE: SELECT emp_no,bdate, LAG(bdate,1) OVER (order by bdate) as "Previous" FROM Employee ;

OUTPUT:

```
SQL> SELECT emp_no,bdate, LAG(bdate,1) OVER (order by bdate ) as "Previous" FROM Employee ;
```

EMP_NO	BDATE	Previous
109	25-SEP-87	
106	10-JUN-88	25-SEP-87
104	30-APR-89	10-JUN-88
101	15-JAN-90	30-APR-89
107	15-JUL-90	15-JAN-90
102	20-FEB-91	15-JUL-90
103	25-MAR-92	20-FEB-91
105	05-MAY-93	25-MAR-92
108	20-AUG-94	05-MAY-93
110	30-OCT-95	20-AUG-94

10 rows selected.

FIRST

SOURCE CODE:

SELECT dep_no, salary, MAX(salary) KEEP (DENSE_RANK FIRST ORDER BY salary DESC) OVER (PARTITION BY dep_no) AS "max" FROM employee;

OUTPUT:

```
SQL> SELECT      dep_no, salary,  MAX(salary) KEEP (DENSE_RANK FIRST ORDER BY salary DESC) OVER (PARTITION BY dep_no) AS "max" FROM employee;
```

DEP_NO	SALARY	max
10	22000	22000
10	22000	22000
10	22000	22000
10	22000	22000
10	22000	22000
20	22000	22000
50	22000	22000
70	22000	22000
70	22000	22000
90	22000	22000

10 rows selected.

```
SQL> |
```

LAST:

SOURCE CODE : SELECT dep_no, salary, MIN(salary) KEEP (DENSE_RANK LAST ORDER BY salary DESC) OVER (PARTITION BY dep_no) AS "last" FROM employee;

OUTPUT:

```
SQL> SELECT dep_no, salary,  MIN(salary) KEEP (DENSE_RANK LAST ORDER BY salary DESC) OVER (PARTITION BY dep_no) AS "last" FROM employee;
```

DEP_NO	SALARY	last
10	22000	22000
10	22000	22000
10	22000	22000
10	22000	22000
10	22000	22000
20	22000	22000
50	22000	22000
70	22000	22000
70	22000	22000
90	22000	22000

10 rows selected.

```
SQL> |
```