

SQL> CL SCR

```
SQL> SELECT
  2  ENAME,
  3  DEPTNO,
  4  SAL,
  5  SUM(SAL)
  6  OVER
  7  (
  8  ORDER BY SAL DESC, EMPNO
  9  ) RUNSAL
 10  FROM EMP;
```

ENAME	DEPTNO	SAL	RUNSAL
KING	10	5000	5000
SCOTT	20	3000	8000
FORD	20	3000	11000
JONES	20	2975	13975
BLAKE	30	2850	16825
CLARK	10	2450	19275
ALLEN	30	1600	20875
TURNER	30	1500	22375
MILLER	10	1300	23675
WARD	30	1250	24925
MARTIN	30	1250	26175

ENAME	DEPTNO	SAL	RUNSAL
ADAMS	20	1100	27275
JAMES	30	950	28225
SMITH	20	800	29025

14 rows selected.

```
SQL> SELECT
  2  DEPTNO,
  3  ENAME,
  4  SAL,
  5  SUM(SAL)
  6  OVER
  7  (
  8  PARTITION BY DEPTNO --PARTITION BY CLAUSE
  9  ORDER BY SAL DESC, EMPNO --ORDER BY CLAUSE
 10  ROWS 2 PRECEDING --WINDOW CLAUSE
 11  ) "Sliding Total"
 12  FROM EMP;
```

DEPTNO	ENAME	SAL	Sliding Total
10	KING	5000	5000
10	CLARK	2450	7450
10	MILLER	1300	8750

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20	SCOTT	3000	3000
20	FORD	3000	6000
20	JONES	2975	8975
20	ADAMS	1100	7075
20	SMITH	800	4875
30	BLAKE	2850	2850
30	ALLEN	1600	4450
30	TURNER	1500	5950

DEPTNO	ENAME	SAL	Sliding Total
30	WARD	1250	4350
30	MARTIN	1250	4000
30	JAMES	950	3450

14 rows selected.

```
SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL,
  5  LAG(SAL,1,0)
  6  OVER
  7  (
  8  ORDER BY HIREDATE
  9  ) PRESAL
 10  FROM EMP;
```

ENAME	HIREDATE	SAL	PRESAL
SMITH	17-DEC-80	800	0
ALLEN	20-FEB-81	1600	800
WARD	22-FEB-81	1250	1600
JONES	02-APR-81	2975	1250
BLAKE	01-MAY-81	2850	2975
CLARK	09-JUN-81	2450	2850
TURNER	08-SEP-81	1500	2450
MARTIN	28-SEP-81	1250	1500
KING	17-NOV-81	5000	1250
JAMES	03-DEC-81	950	5000
FORD	03-DEC-81	3000	950

ENAME	HIREDATE	SAL	PRESAL
MILLER	23-JAN-82	1300	3000
SCOTT	19-APR-87	3000	1300
ADAMS	23-MAY-87	1100	3000

14 rows selected.

```
SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL,
```

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```
5  LAG (SAL)
6  OVER
7  (
8  ORDER BY HIREDATE
9  ) PRESAL
10 FROM EMP;
```

ENAME	HIREDATE	SAL	PRESAL
SMITH	17-DEC-80	800	
ALLEN	20-FEB-81	1600	800
WARD	22-FEB-81	1250	1600
JONES	02-APR-81	2975	1250
BLAKE	01-MAY-81	2850	2975
CLARK	09-JUN-81	2450	2850
TURNER	08-SEP-81	1500	2450
MARTIN	28-SEP-81	1250	1500
KING	17-NOV-81	5000	1250
JAMES	03-DEC-81	950	5000
FORD	03-DEC-81	3000	950

ENAME	HIREDATE	SAL	PRESAL
MILLER	23-JAN-82	1300	3000
SCOTT	19-APR-87	3000	1300
ADAMS	23-MAY-87	1100	3000

14 rows selected.

```
SQL> SELECT
2  ENAME,
3  HIREDATE,
4  SAL,
5  LEAD (SAL,1,0)
6  OVER
7  (
8  ORDER BY HIREDATE
9  ) NEXTSAL
10 FROM EMP;
```

ENAME	HIREDATE	SAL	NEXTSAL
SMITH	17-DEC-80	800	1600
ALLEN	20-FEB-81	1600	1250
WARD	22-FEB-81	1250	2975
JONES	02-APR-81	2975	2850
BLAKE	01-MAY-81	2850	2450
CLARK	09-JUN-81	2450	1500
TURNER	08-SEP-81	1500	1250
MARTIN	28-SEP-81	1250	5000
KING	17-NOV-81	5000	950
JAMES	03-DEC-81	950	3000
FORD	03-DEC-81	3000	1300

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ENAME	HIREDATE	SAL	NEXTSAL
MILLER	23-JAN-82	1300	3000
SCOTT	19-APR-87	3000	1100
ADAMS	23-MAY-87	1100	0

14 rows selected.

```
SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL,
  5  LEAD(SAL)
  6  OVER
  7  (
  8  ORDER BY HIREDATE
  9  ) NEXTSAL
 10  FROM EMP;
```

ENAME	HIREDATE	SAL	NEXTSAL
SMITH	17-DEC-80	800	1600
ALLEN	20-FEB-81	1600	1250
WARD	22-FEB-81	1250	2975
JONES	02-APR-81	2975	2850
BLAKE	01-MAY-81	2850	2450
CLARK	09-JUN-81	2450	1500
TURNER	08-SEP-81	1500	1250
MARTIN	28-SEP-81	1250	5000
KING	17-NOV-81	5000	950
JAMES	03-DEC-81	950	3000
FORD	03-DEC-81	3000	1300

ENAME	HIREDATE	SAL	NEXTSAL
MILLER	23-JAN-82	1300	3000
SCOTT	19-APR-87	3000	1100
ADAMS	23-MAY-87	1100	

14 rows selected.

```
SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL,
  5  LAG(SAL,1)
  6  OVER
  7  (
  8  ORDER BY HIREDATE
  9  ) PRESAL01,
 10  LAG(SAL,2)
 11  OVER
 12  (
 13  ORDER BY HIREDATE
```

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```

14  ) PRESAL02,
15  LAG (SAL, 3)
16  OVER
17  (
18  ORDER BY HIREDATE
19  ) PRESAL03,
20  LAG (SAL, 4)
21  OVER
22  (
23  ORDER BY HIREDATE
24  ) PRESAL04
25  FROM EMP;

```

ENAME	HIREDATE	SAL	PRESAL01	PRESAL02	PRESAL03	PRESAL04
SMITH	17-DEC-80	800				
ALLEN	20-FEB-81	1600	800			
WARD	22-FEB-81	1250	1600	800		
JONES	02-APR-81	2975	1250	1600	800	
BLAKE	01-MAY-81	2850	2975	1250	1600	800
CLARK	09-JUN-81	2450	2850	2975	1250	1600
TURNER	08-SEP-81	1500	2450	2850	2975	1250
MARTIN	28-SEP-81	1250	1500	2450	2850	2975
KING	17-NOV-81	5000	1250	1500	2450	2850
JAMES	03-DEC-81	950	5000	1250	1500	2450
FORD	03-DEC-81	3000	950	5000	1250	1500

ENAME	HIREDATE	SAL	PRESAL01	PRESAL02	PRESAL03	PRESAL04
MILLER	23-JAN-82	1300	3000	950	5000	1250
SCOTT	19-APR-87	3000	1300	3000	950	5000
ADAMS	23-MAY-87	1100	3000	1300	3000	950

14 rows selected.

```

SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL,
  5  LEAD (SAL, 1)
  6  OVER
  7  (
  8  ORDER BY HIREDATE
  9  ) NEXTSAL01,
10  LEAD (SAL, 2)
11  OVER
12  (
13  ORDER BY HIREDATE
14  ) NEXTSAL02,
15  LEAD (SAL, 3)
16  OVER
17  (
18  ORDER BY HIREDATE
19  ) NEXTSAL03,

```

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```

20 LEAD(SAL,4)
21 OVER
22 (
23 ORDER BY HIREDATE
24 ) NEXTSAL04
25 FROM EMP;

```

ENAME	HIREDATE	SAL	NEXTSAL01	NEXTSAL02	NEXTSAL03	NEXTSAL04
SMITH	17-DEC-80	800	1600	1250	2975	2850
ALLEN	20-FEB-81	1600	1250	2975	2850	2450
WARD	22-FEB-81	1250	2975	2850	2450	1500
JONES	02-APR-81	2975	2850	2450	1500	1250
BLAKE	01-MAY-81	2850	2450	1500	1250	5000
CLARK	09-JUN-81	2450	1500	1250	5000	950
TURNER	08-SEP-81	1500	1250	5000	950	3000
MARTIN	28-SEP-81	1250	5000	950	3000	1300
KING	17-NOV-81	5000	950	3000	1300	3000
JAMES	03-DEC-81	950	3000	1300	3000	1100
FORD	03-DEC-81	3000	1300	3000	1100	

ENAME	HIREDATE	SAL	NEXTSAL01	NEXTSAL02	NEXTSAL03	NEXTSAL04
MILLER	23-JAN-82	1300	3000	1100		
SCOTT	19-APR-87	3000	1100			
ADAMS	23-MAY-87	1100				

14 rows selected.

```

SQL> SELECT
2  ENAME,
3  HIREDATE,
4  LAG(SAL,1)
5  OVER
6  (
7  ORDER BY HIREDATE
8  ) PRESAL,
9  SAL CURRSAL,
10 LEAD(SAL,1)
11 OVER
12 (
13 ORDER BY HIREDATE
14 ) NEXTSAL
15 FROM EMP;

```

ENAME	HIREDATE	PRESAL	CURRSAL	NEXTSAL
SMITH	17-DEC-80		800	1600
ALLEN	20-FEB-81	800	1600	1250
WARD	22-FEB-81	1600	1250	2975
JONES	02-APR-81	1250	2975	2850
BLAKE	01-MAY-81	2975	2850	2450
CLARK	09-JUN-81	2850	2450	1500
TURNER	08-SEP-81	2450	1500	1250

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MARTIN	28-SEP-81	1500	1250	5000
KING	17-NOV-81	1250	5000	950
JAMES	03-DEC-81	5000	950	3000
FORD	03-DEC-81	950	3000	1300

ENAME	HIREDATE	PRESAL	CURRSAL	NEXTSAL
MILLER	23-JAN-82	3000	1300	3000
SCOTT	19-APR-87	1300	3000	1100
ADAMS	23-MAY-87	3000	1100	

14 rows selected.

```
SQL> SELECT
  2  ENAME,
  3  HIREDATE,
  4  SAL-LAG(SAL,1,0)
  5  OVER
  6  (
  7  ORDER BY HIREDATE
  8  ) DIFFPRESAL,
  9  SAL CURRSAL
 10  FROM EMP;
```

ENAME	HIREDATE	DIFFPRESAL	CURRSAL
SMITH	17-DEC-80	800	800
ALLEN	20-FEB-81	800	1600
WARD	22-FEB-81	-350	1250
JONES	02-APR-81	1725	2975
BLAKE	01-MAY-81	-125	2850
CLARK	09-JUN-81	-400	2450
TURNER	08-SEP-81	-950	1500
MARTIN	28-SEP-81	-250	1250
KING	17-NOV-81	3750	5000
JAMES	03-DEC-81	-4050	950
FORD	03-DEC-81	2050	3000

ENAME	HIREDATE	DIFFPRESAL	CURRSAL
MILLER	23-JAN-82	-1700	1300
SCOTT	19-APR-87	1700	3000
ADAMS	23-MAY-87	-1900	1100

14 rows selected.

```
SQL> ED
Wrote file afiedt.buf
```

```
1  SELECT
2  ENAME,
3  HIREDATE,
4  ABS(SAL-LAG(SAL,1,0))
5  OVER
```

```

6  (
7  ORDER BY HIREDATE
8  )) DIFFPRESAL,
9  SAL CURRSAL
10* FROM EMP
SQL> /

```

ENAME	HIREDATE	DIFFPRESAL	CURRSAL
SMITH	17-DEC-80	800	800
ALLEN	20-FEB-81	800	1600
WARD	22-FEB-81	350	1250
JONES	02-APR-81	1725	2975
BLAKE	01-MAY-81	125	2850
CLARK	09-JUN-81	400	2450
TURNER	08-SEP-81	950	1500
MARTIN	28-SEP-81	250	1250
KING	17-NOV-81	3750	5000
JAMES	03-DEC-81	4050	950
FORD	03-DEC-81	2050	3000

ENAME	HIREDATE	DIFFPRESAL	CURRSAL
MILLER	23-JAN-82	1700	1300
SCOTT	19-APR-87	1700	3000
ADAMS	23-MAY-87	1900	1100

14 rows selected.

```

SQL> COLUMN REMARKS FORMAT A30
SQL> SELECT
2  E1.ENAME,
3  E1.HIREDATE,
4  E1.SAL,
5  ABS(E1.DIFFNEXTSAL) || DECODE
6  (
7  SIGN(E1.DIFFNEXTSAL),
8  1, ' MORE THAN NEXT SALARY.',
9  -1, ' LESS THAN NEXT SALARY.',
10 ' SALARIES ARE EQUAL.'
11 ) REMARKS
12 FROM
13 (
14 SELECT
15 ENAME,
16 HIREDATE,
17 SAL,
18 SAL-LEAD(SAL,1,0)
19 OVER
20 (
21 ORDER BY HIREDATE
22 ) DIFFNEXTSAL
23 FROM EMP
24 ) E1;

```


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ENAME	HIREDATE	SAL	REMARKS
SMITH	17-DEC-80	800	800 LESS THAN NEXT SALARY.
ALLEN	20-FEB-81	1600	350 MORE THAN NEXT SALARY.
WARD	22-FEB-81	1250	1725 LESS THAN NEXT SALARY.
JONES	02-APR-81	2975	125 MORE THAN NEXT SALARY.
BLAKE	01-MAY-81	2850	400 MORE THAN NEXT SALARY.
CLARK	09-JUN-81	2450	950 MORE THAN NEXT SALARY.
TURNER	08-SEP-81	1500	250 MORE THAN NEXT SALARY.
MARTIN	28-SEP-81	1250	3750 LESS THAN NEXT SALARY.
KING	17-NOV-81	5000	4050 MORE THAN NEXT SALARY.
JAMES	03-DEC-81	950	2050 LESS THAN NEXT SALARY.
FORD	03-DEC-81	3000	1700 MORE THAN NEXT SALARY.

ENAME	HIREDATE	SAL	REMARKS
MILLER	23-JAN-82	1300	1700 LESS THAN NEXT SALARY.
SCOTT	19-APR-87	3000	1900 MORE THAN NEXT SALARY.
ADAMS	23-MAY-87	1100	1100 MORE THAN NEXT SALARY.

14 rows selected.

```

SQL> COL REMARKS FORMAT A35
SQL> SELECT
  2  E1.ENAME,
  3  E1.HIREDATE,
  4  TO_CHAR(E1.SAL,'9G99G999D99') SAL,
  5  TO_CHAR(ABS(E1.DIFFNEXTSAL),'9G99G999D99') || DECODE
  6  (
  7  SIGN(E1.DIFFNEXTSAL),
  8  1,' MORE THAN NEXT SALARY.',
  9  -1,' LESS THAN NEXT SALARY.',
 10  'SALARIES ARE EQUAL.'
 11  ) REMARKS
 12  FROM
 13  (
 14  SELECT
 15  ENAME,
 16  HIREDATE,
 17  SAL,
 18  SAL-LEAD(SAL,1,0)
 19  OVER
 20  (
 21  ORDER BY HIREDATE
 22  ) DIFFNEXTSAL
 23  FROM EMP
 24  ) E1;

```

ENAME	HIREDATE	SAL	REMARKS
SMITH	17-DEC-80	800.00	800.00 LESS THAN NEXT SALARY.
ALLEN	20-FEB-81	1,600.00	350.00 MORE THAN NEXT SALARY.
WARD	22-FEB-81	1,250.00	1,725.00 LESS THAN NEXT SALARY.

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JONES	02-APR-81	2,975.00	125.00 MORE THAN NEXT SALARY.
BLAKE	01-MAY-81	2,850.00	400.00 MORE THAN NEXT SALARY.
CLARK	09-JUN-81	2,450.00	950.00 MORE THAN NEXT SALARY.
TURNER	08-SEP-81	1,500.00	250.00 MORE THAN NEXT SALARY.
MARTIN	28-SEP-81	1,250.00	3,750.00 LESS THAN NEXT SALARY.
KING	17-NOV-81	5,000.00	4,050.00 MORE THAN NEXT SALARY.
JAMES	03-DEC-81	950.00	2,050.00 LESS THAN NEXT SALARY.
FORD	03-DEC-81	3,000.00	1,700.00 MORE THAN NEXT SALARY.

ENAME	HIREDATE	SAL	REMARKS
MILLER	23-JAN-82	1,300.00	1,700.00 LESS THAN NEXT SALARY.
SCOTT	19-APR-87	3,000.00	1,900.00 MORE THAN NEXT SALARY.
ADAMS	23-MAY-87	1,100.00	1,100.00 MORE THAN NEXT SALARY.

14 rows selected.

```

SQL> COL REMARKS FORMAT A40
SQL> SELECT
  2  E1.DEPTNO,
  3  E1.DEPTSALSUM,
  4  ABS(E1.DEPTSALSUM-NEXTSAL) ||
  5  DECODE
  6  (
  7      NVL
  8      (
  9          SIGN
10          (
11              E1.DEPTSALSUM-NEXTSAL
12          ),0
13      ),
14      1,' MORE BUDGET THAN NEXT DEPARTMENT',
15      -1,' LESS BUDGET THAN NEXT DEPARTMENT',
16      0,' TERMINATING DEPARTMENT'
17  ) REMARKS
18  FROM
19  (
20  SELECT
21  DEPTNO,
22  SUM(SAL) DEPTSALSUM,
23  LEAD(SUM(SAL),1,NULL)
24  OVER
25  (
26  ORDER BY DEPTNO
27  ) NEXTSAL
28  FROM EMP
29  GROUP BY DEPTNO
30  ) E1;

```

DEPTNO	DEPTSALSUM	NEXTSAL	REMARKS
10	8750	2125	LESS BUDGET THAN NEXT DEPARTMENT
20	10875	1475	MORE BUDGET THAN NEXT DEPARTMENT
30	9400		TERMINATING DEPARTMENT

```
SQL> SPOOL OFF
```

Oracle 11g(SQL) By Balram