```
SQL> SELECT DEPTNO, JOB, SUM(SAL)
  2  FROM EMP
  3  GROUP BY GROUPING SETS(DEPTNO,JOB);

DEPTNO JOB         SUM(SAL)
------ ---------- --------
       CLERK          4150
       SALESMAN       5600
       PRESIDENT      5000
       MANAGER        8275
       ANALYST        6000
    30                9400
    20               10875
    10                8750

8 rows selected.

SQL> SELECT DEPTNO, NULL JOB, SUM(SAL)
  2  FROM EMP
  3  GROUP BY DEPTNO
  4  UNION
  5  SELECT NULL DEPTNO, JOB, SUM(SAL)
  6  FROM EMP
  7  GROUP BY JOB;

DEPTNO JOB         SUM(SAL)
------ ---------- --------
    10                8750
    20               10875
    30                9400
       ANALYST        6000
       CLERK          4150
       MANAGER        8275
       PRESIDENT      5000
       SALESMAN       5600

8 rows selected.

SQL> SELECT
  2  DEPTNO,
  3  JOB,
  4  MGR,
  5  TO_CHAR(HIREDATE,'YYYY') YEAR,
  6  TO_CHAR(HIREDATE,'Q') QUARTER,
  7  TO_CHAR(HIREDATE,'FMMONTH') MONTH,
  8  TO_CHAR(HIREDATE,'W') WEEK,
  9  TO_CHAR(HIREDATE,'FMDAY') DAY,
 10  SUM(SAL)
 11  FROM EMP
 12  GROUP BY GROUPING SETS
 13  (
 14  DEPTNO,
 15  JOB,
 16  MGR,
```

```
17   TO_CHAR(HIREDATE,'YYYY'),
18   TO_CHAR(HIREDATE,'Q'),
19   TO_CHAR(HIREDATE,'FMMONTH'),
20   TO_CHAR(HIREDATE,'W'),
21   TO_CHAR(HIREDATE,'FMDAY')
22   );
```

DEPTNO	JOB	MGR	YEAR	Q	MONTH	W	DAY	SUM(SAL)
		7839						8275
								5000
		7782						1300
		7698						6550
		7902						800
		7566						6000
		7788						1100
	CLERK							4150
	SALESMAN							5600
	PRESIDENT							5000
	MANAGER							8275
	ANALYST							6000
30								9400
20								10875
10								8750
			1987					4100
			1980					800

DEPTNO	JOB	MGR	YEAR	Q	MONTH	W	DAY	SUM(SAL)
			1982					1300
			1981					22825
				1				4150
				3				2750
				4				9750
				2				12375
					FEBRUARY			2850
					NOVEMBER			5000
					JUNE			2450
					DECEMBER			4750
					APRIL			5975
					JANUARY			1300
					SEPTEMBER			2750
					MAY			3950
						1		9775
						3		10400
						4		4900

DEPTNO	JOB	MGR	YEAR	Q	MONTH	W	DAY	SUM(SAL)
						2		3950
							THURSDAY	6925
							FRIDAY	4450
							TUESDAY	8950
							SUNDAY	4250

```
                                        MONDAY        1250
                                        WEDNESDAY      800
                                        SATURDAY      2400

42 rows selected.

SQL> SELECT ENAME, DEPTNO,
  2  CASE DEPTNO
  3  WHEN 10 THEN 'ACCOUNTING'
  4  WHEN 20 THEN 'RESEARCH'
  5  WHEN 30 THEN 'SALES'
  6  WHEN 40 THEN 'OPERATIONS'
  7  ELSE 'NOT FOUND'
  8  END DNAME
  9  FROM EMP;

ENAME          DEPTNO DNAME
---------- ------ ----------
JAMES          30 SALES
SMITH          20 RESEARCH
ALLEN          30 SALES
WARD           30 SALES
JONES          20 RESEARCH
MARTIN         30 SALES
BLAKE          30 SALES
CLARK          10 ACCOUNTING
SCOTT          20 RESEARCH
KING           10 ACCOUNTING
TURNER         30 SALES
ADAMS          20 RESEARCH
FORD           20 RESEARCH
MILLER         10 ACCOUNTING

14 rows selected.

SQL> SELECT ENAME, DEPTNO,
  2  DECODE
  3  (
  4  DEPTNO,
  5  10,'ACCOUNTING',
  6  20,'RESEARCH',
  7  30,'SALES',
  8  40,'OPERATIONS',
  9  'NOT FOUND'
 10  ) DNAME
 11  FROM EMP;

ENAME          DEPTNO DNAME
---------- ------ ----------
JAMES          30 SALES
SMITH          20 RESEARCH
ALLEN          30 SALES
WARD           30 SALES
JONES          20 RESEARCH
```

```
MARTIN          30 SALES
BLAKE           30 SALES
CLARK           10 ACCOUNTING
SCOTT           20 RESEARCH
KING            10 ACCOUNTING
TURNER          30 SALES
ADAMS           20 RESEARCH
FORD            20 RESEARCH
MILLER          10 ACCOUNTING

14 rows selected.

SQL> SELECT ENAME, DEPTNO,
  2  CASE
  3  WHEN DEPTNO = 10 THEN 'ACCOUNTING'
  4  WHEN DEPTNO = 20 THEN 'RESEARCH'
  5  WHEN DEPTNO = 30 THEN 'SALES'
  6  WHEN DEPTNO = 40 THEN 'OPEARATIONS'
  7  ELSE 'NOT SPECIFIED'
  8  END DNAME
  9  FROM EMP;

ENAME       DEPTNO DNAME
---------- ------ -------------
JAMES           30 SALES
SMITH           20 RESEARCH
ALLEN           30 SALES
WARD            30 SALES
JONES           20 RESEARCH
MARTIN          30 SALES
BLAKE           30 SALES
CLARK           10 ACCOUNTING
SCOTT           20 RESEARCH
KING            10 ACCOUNTING
TURNER          30 SALES
ADAMS           20 RESEARCH
FORD            20 RESEARCH
MILLER          10 ACCOUNTING

14 rows selected.

SQL> --SEARCHED CASE--
SQL> SELECT ENAME, DEPTNO,
  2  CASE
  3  WHEN SAL>=800 AND SAL <=2000
  4  THEN 'LOWEST PAY'
  5  WHEN SAL >=2001 AND SAL <=4000
  6  THEN 'MODERATE PAY'
  7  ELSE 'HIGH PAY'
  8  END REMARKS
  9  FROM EMP;

ENAME       DEPTNO REMARKS
---------- ------ ------------
```

```
JAMES          30 LOWEST PAY
SMITH          20 LOWEST PAY
ALLEN          30 LOWEST PAY
WARD           30 LOWEST PAY
JONES          20 MODERATE PAY
MARTIN         30 LOWEST PAY
BLAKE          30 MODERATE PAY
CLARK          10 MODERATE PAY
SCOTT          20 MODERATE PAY
KING           10 HIGH PAY
TURNER         30 LOWEST PAY
ADAMS          20 LOWEST PAY
FORD           20 MODERATE PAY
MILLER         10 LOWEST PAY

14 rows selected.

SQL> SELECT ENAME, DEPTNO,SAL,
  2  CASE
  3  WHEN SAL BETWEEN 800 AND 2000
  4  THEN 'LOWEST PAY'
  5  WHEN SAL BETWEEN 2001 AND 4000
  6  THEN 'MODERATE PAY'
  7  ELSE 'HIGH PAY'
  8  END REMARKS
  9  FROM EMP;

ENAME        DEPTNO   SAL REMARKS
---------- ------ ----- ------------
JAMES          30   950 LOWEST PAY
SMITH          20   800 LOWEST PAY
ALLEN          30  1600 LOWEST PAY
WARD           30  1250 LOWEST PAY
JONES          20  2975 MODERATE PAY
MARTIN         30  1250 LOWEST PAY
BLAKE          30  2850 MODERATE PAY
CLARK          10  2450 MODERATE PAY
SCOTT          20  3000 MODERATE PAY
KING           10  5000 HIGH PAY
TURNER         30  1500 LOWEST PAY
ADAMS          20  1100 LOWEST PAY
FORD           20  3000 MODERATE PAY
MILLER         10  1300 LOWEST PAY

14 rows selected.

SQL> SPOOL OFF
```