Oracle基础知识：伪列rownum，伪列就像表中的列一样，但是在表中并不存储。伪列只能查询，不能进行增删改操作。

在查询的结果集中，ROWNUM为结果集中每一行标识一个行号，第一行返回1，第二行返回2，以此类推。通过ROWNUM伪列可以限制查询结果集中返回的行数。

ROWNUM与ROWID不同，ROWID是插入记录时生成，ROWNUM是查询数据时生成。ROWID标识的是行的物理地址。ROWNUM标识的是查询结果中的行的次序。

案例4：查询出员工表中前5名员工的姓名，工作，工资。

**代码演示：ROWNUM**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SQL> SELECT ROWNUM,ENAME,JOB,SAL FROM EMP WHERE ROWNUM<=5;   |  |  |  |  | | --- | --- | --- | --- | | **ROWNUM** | **ENAME** | **JOB** | **SAL** | | 1 | SMITH | CLERK | 800 | | 2 | ALLEN | SALESMAN | 1600 | | 3 | WARD | SALESMAN | 1250 | | 4 | JONES | MANAGER | 2975 | | 5 | MARTIN | SALESMAN | 1250 | |

案例5：查询出工资最高的前5名员工的姓名、工资和工资。

**案例分析**

“工资最高的前5名”需要先降序排序，再取前5名，但是生成ROWNUM操作比排序要早，排序时已经连同ROWNUM一起排序了，因此不能直接在案例1的语句中直接加上Order by就行，而是需要对排序的结果重新做二次查询，产生新的ROWNUM才能作为查询的条件依据。

代码演示：ROWNUM应用

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SQL> SELECT ROWNUM,T.\* FROM  ①    2      (SELECT ENAME,JOB,SAL    3       FROM EMP ORDER BY SAL DESC) T  ②    4  WHERE ROWNUM<=5    5  /     |  |  |  |  | | --- | --- | --- | --- | | **ROWNUM** | **ENAME** | **JOB** | **SAL** | | 1 | KING | PRESIDENT | 5000 | | 2 | SCOTT | ANALYST | 3000 | | 3 | FORD | ANALYST | 3000 | | 4 | JONES | MANAGER | 2975 | | 5 | BLAKE | MANAGER | 2850 | |

代码解析：

① T是子查询②的别名，这里的ROWNUM是第二次查询后的ROWNUM。

案例6：查询出表EMP中第5条到第10条之间的记录。

**案例分析**

这是分页的应用。在查询条件中，如果查询条件中ROWNUM大于某一正整数，则不返还任何结果。

代码演示：ROWNUM分页

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SQL> SELECT \* FROM    2     (SELECT ROWNUM R,ENAME,JOB,SAL  ①    3      FROM EMP WHERE ROWNUM<=10)  ②    4  WHERE R>5  ③    5  /   |  |  |  |  | | --- | --- | --- | --- | | **R** | **ENAME** | **JOB** | **SAL** | | 6 | BLAKE | MANAGER | 2850 | | 7 | CLARK | MANAGER | 2450 | | 8 | SCOTT | ANALYST | 3000 | | 9 | KING | PRESIDENT | 5000 | | 10 | TURNER | SALESMAN | 1500 | |

代码解析：

① 内部查询中得到ROWNUM 并且用别名R记录，供外层条件③使用。

② 内部查询的ROWNUM，与外出的ROWNUM列是平等的两列。

③ 使用的R是内层产生的ROWNUM，在外层看来，内层查询的ROWNUM是正常的一列。

转自https://www.cnblogs.com/oraclestudy/articles/5764380.html