实验五  游标

**一．上机目的**

1．了解游标的概念。

2．熟悉游标的基本用法。

**二．实验主要内容**

编写PL/SQL存储过程与函数，利用游标实现以下功能**，**存储过程与函数依次命名为obj5\_1**、**obj5**\_2、…**

1. 用显式游标输出emp表的所有信息。

DECLARE

CURSOR obj5\_1 IS SELECT \* FROM EMP;

emp\_record obj5\_1%ROWTYPE;

BEGIN

OPEN obj5\_1 ;

LOOP

FETCH obj5\_1 INTO emp\_record;

EXIT WHEN obj5\_1%NOTFOUND;

dbms\_output.put\_line('EMPNO:'||emp\_record.EMPNO||',ENAME:'||emp\_record.ENAME

||',JOB:'||emp\_record.JOB||',MGR:'||emp\_record.MGR||

',HIREDATE:'||emp\_record.HIREDATE||',SAL:'||emp\_record.SAL||

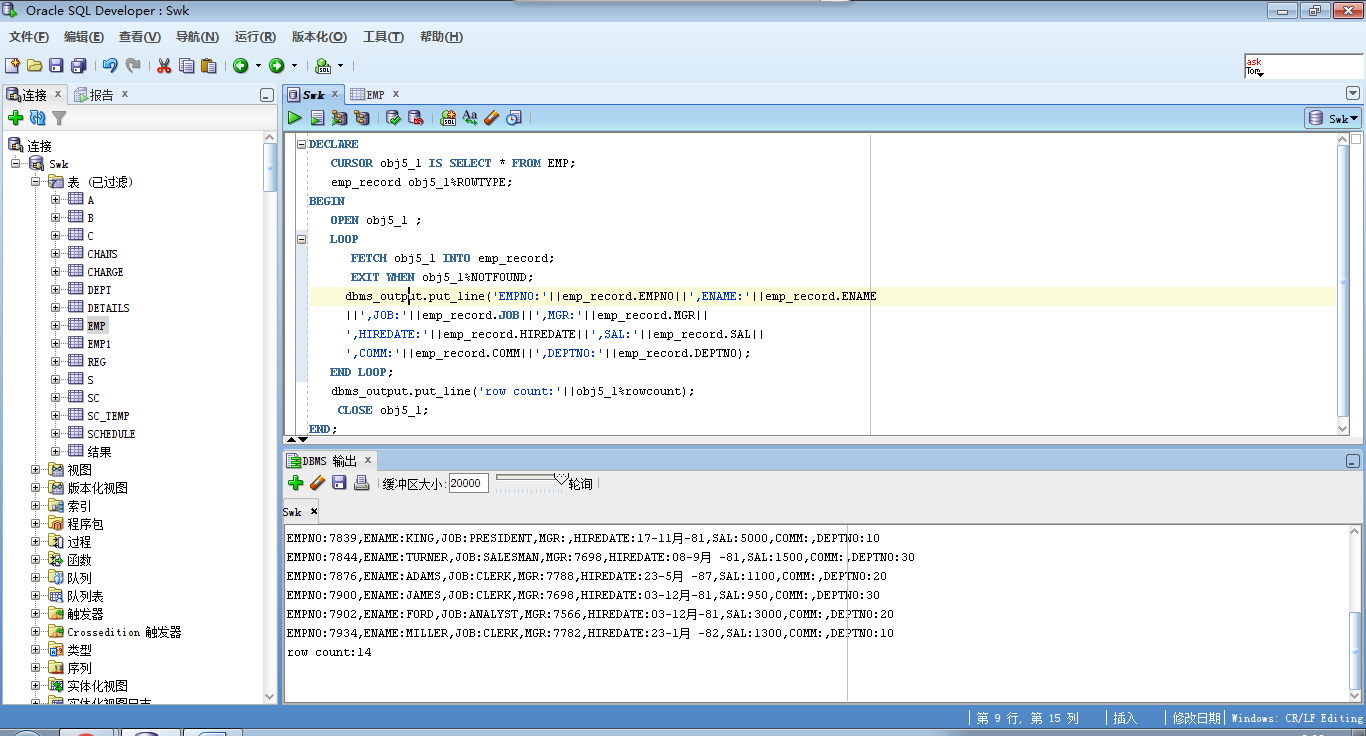
',COMM:'||emp\_record.COMM||',DEPTNO:'||emp\_record.DEPTNO);

END LOOP;

dbms\_output.put\_line('row count:'||obj5\_1%rowcount);

CLOSE obj5\_1;

END;



1. 用隐式游标输出dept表的所有信息。

BEGIN

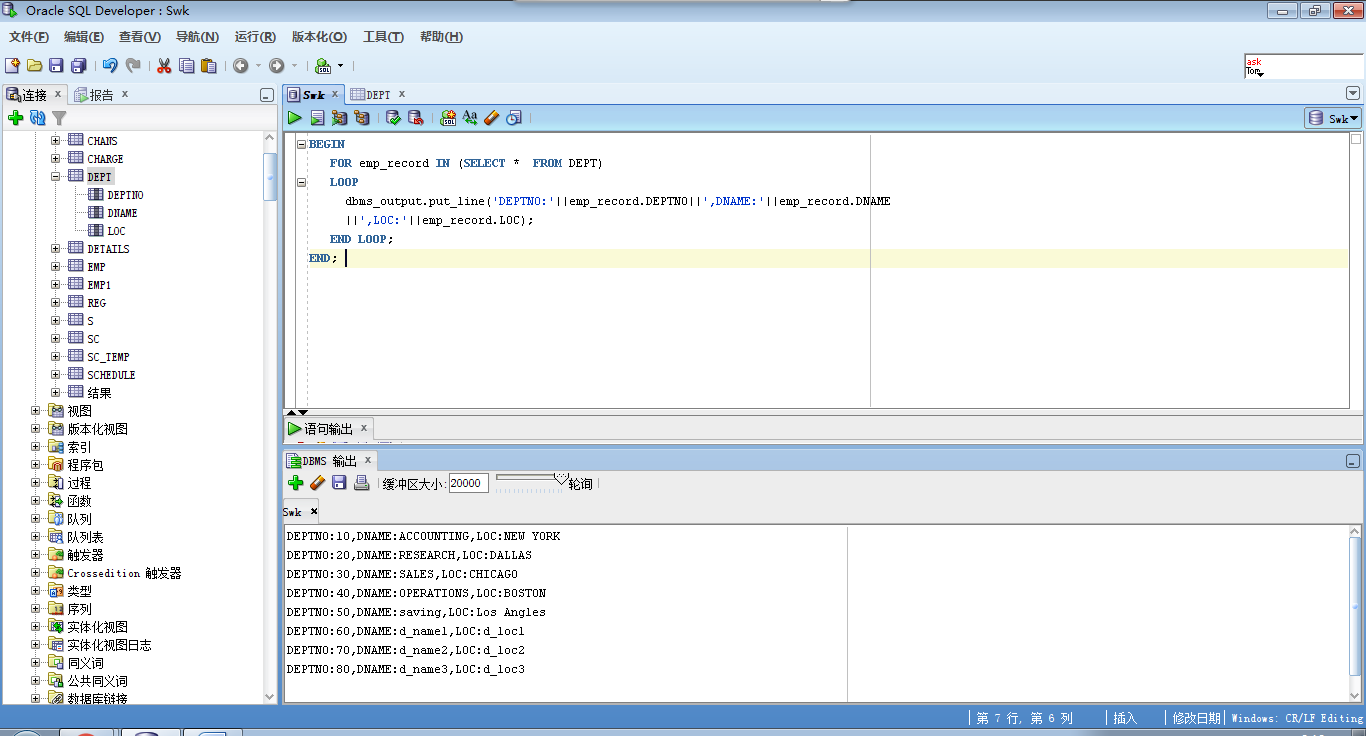
FOR emp\_record IN (SELECT \* FROM DEPT)

LOOP

dbms\_output.put\_line('DEPTNO:'||emp\_record.DEPTNO||',DNAME:'||emp\_record.DNAME

||',LOC:'||emp\_record.LOC);

END LOOP;

END; 

3．  利用游标，修改员工工资。根据job不同，为员工增加相应的sal：

    Job         raise

    clerk      +500

    salesman   +1000

    analyst    +1500

otherwise  +2000

declare

temp EMP1.SAL%type;

BEGIN

FOR emp\_record IN (SELECT EMPNO,JOB,SAL FROM EMP1)

LOOP

update EMP1 set SAL=(

case

when emp\_record.JOB= 'CLERK' then emp\_record.SAL + 500

when emp\_record.JOB= 'SALESMAN' then emp\_record.SAL + 1000

when emp\_record.JOB= 'ANALYST' then emp\_record.SAL + 1500

else emp\_record.SAL + 2000

end)

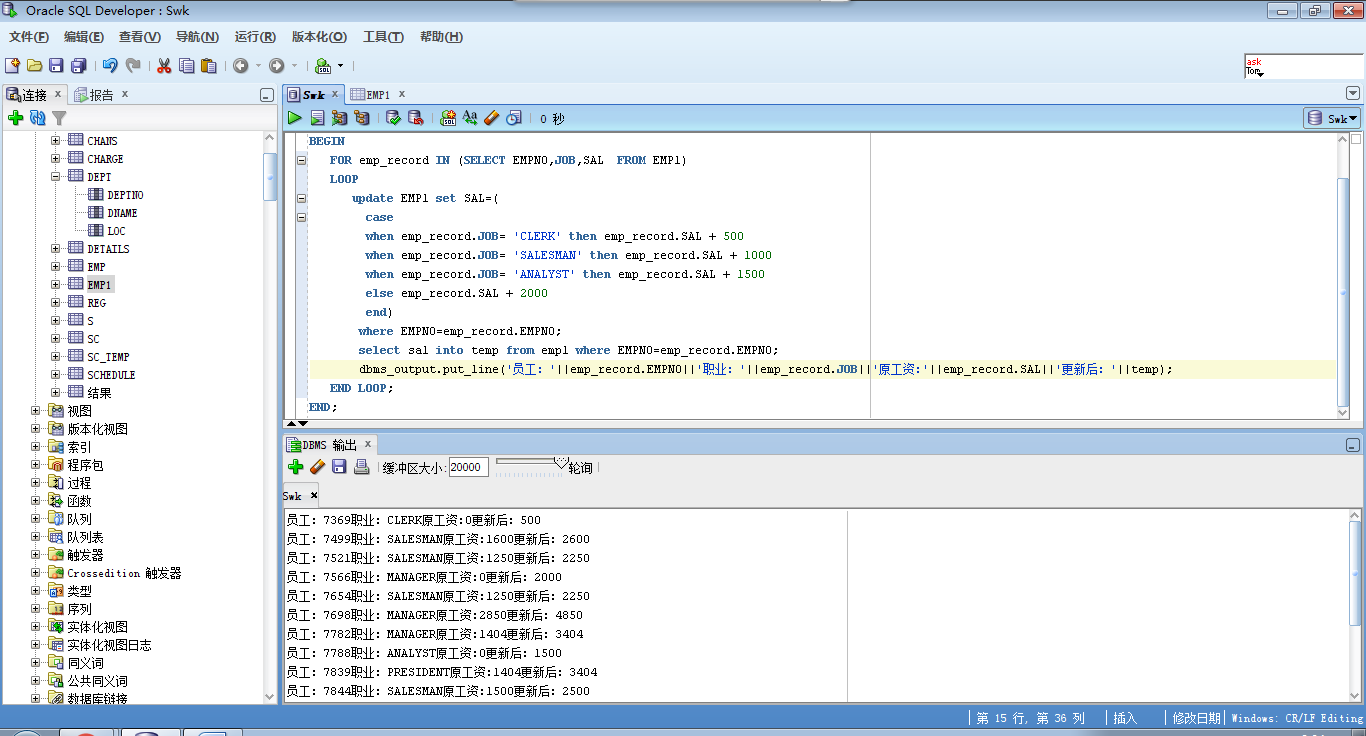
where EMPNO=emp\_record.EMPNO;

select sal into temp from emp1 where EMPNO=emp\_record.EMPNO;

dbms\_output.put\_line('员工：'||emp\_record.EMPNO||'职业：'||emp\_record.JOB||'原工资:'||emp\_record.SAL||'更新后：'||temp);

END LOOP;

END;



4．用显式游标输出指定学年欠费的学生名单（含姓名、专业、欠费金额）。

create or replace

procedure obj5\_4(year charge.SHYEAR%type)

as

cursor obj5\_4 is select SNO,TUITION,BALANCE from charge where SHYEAR = year ;

qianfei charge.tuition%type;

r\_tuition charge.tuition%type;

r\_balance charge.balance%type;

r\_sno charge.sno%type;

r\_name s.name%type;

r\_speciality s.speciality%type;

begin

open obj5\_4;

fetch obj5\_4 into r\_sno,r\_tuition,r\_balance;

while obj5\_4% found

LOOP

qianfei := r\_tuition - r\_balance;

if qianfei > 0 then select name,speciality into r\_name,r\_speciality from S where SNO = r\_sno;

dbms\_output.put\_line('name:'||r\_name||',speciality:'||r\_speciality||',qianfei:'||qianfei);

end if;

fetch obj5\_4 into r\_sno,r\_tuition,r\_balance;

end loop;

close obj5\_4;

end;