```
--EXERCICE N1
--O1
-- CREATE OR REPLACE FUNCTION TEST EXIST(p empno IN NUMBER) RETURN BOOLEAN
-- IS
-- v_nbr NUMBER;
-- BEGIN
       -- SELECT COUNT(*) INTO v nbr FROM emp
       -- WHERE empno=p_empno;
       -- IF v_nbr=0 THEN
               -- RETURN FALSE;
       -- ELSE RETURN TRUE;
       -- END IF;
-- END;
-- /
--Test de la fonction TEST_EXIST
-- SET SERVEROUTPUT ON
-- ACCEPT sempno PROMPT 'DONNER LE NUM DE EMP '
-- BEGIN
-- if TEST_EXIST(&sempno) then
-- DBMS_OUTPUT.PUT_LINE('1 employe existe');
-- DBMS_OUTPUT_PUT_LINE('l employe n existe pas');
-- end if;
-- END;
-- /
--O2
-- CREATE OR REPLACE PROCEDURE INSERT EMP(p empno NUMBER,p ename VARCHAR2,p mgr
NUMBER,p_deptno NUMBER)
-- IS
-- v valid BOOLEAN;
-- BEGIN
-- v_valid:=NOT TEST_EXIST(p_empno) AND p_empno IS NOT NULL AND TEST_EXIST(p_mgr);
-- IF v valid THEN
       -- INSERT INTO emp(empno,ename,mgr,deptno)
       -- VALUES(p_empno,p_ename,p_mgr,p_deptno);
-- ELSE
       -- DBMS_OUTPUT.PUT_LINE('Données non valides');
-- END IF;
-- END;
-- /
-- Test de la PROCEDURE INSERT EMP
-- EXECUTE INSERT_EMP(7369,'XXX',7844,20);
----Doit retourner un message d'erreur
--Q3
-- CREATE OR REPLACE PROCEDURE LIST DEPT(p deptno NUMBER,p job VARCHAR)IS
       -- CURSOR emp_cur(pc_deptno NUMBER,pc_job VARCHAR) IS SELECT empno,ename,sal FROM
emp
       -- WHERE deptno=pc_deptno AND job=pc_job;
       -- emp_rec emp_cur%ROWTYPE;
-- BEGIN
```

```
-- OPEN emp_cur(p_deptno,p_job);
-- LOOP
       -- FETCH emp_cur INTO emp_rec;
       -- EXIT WHEN emp_cur%NOTFOUND;
       -- DBMS_OUTPUT_LINE(emp_rec.empno||emp_rec.ename||emp_rec.sal);
-- END LOOP:
-- CLOSE emp_cur;
-- END;
-- /
-- Test du LIST DEPT
-- EXECUTE LIST_DEPT(20,'CLERK');
--O4
-- CREATE OR REPLACE TRIGGER NO DELETE
-- BEFORE DELETE ON DEPT -- AVANT CHAQUE OPERATION DE SUPPRESSION SUR LA TABLE dept
-- FOR EACH ROW --POUR CHAQUE ENREGISTREMENT
-- BEGIN
       -- IF :OLD.LOC='DALLAS' THEN -- LA VARIABLE OLD DETERMINE L'ANCIENNE VALEUR
              -- RAISE_APPLICATION_ERROR (-20001, 'Impossible de supprimer un departement localise a
Dallas');
              -- raise_application_error allows you to issue an user-defined error from a code block or stored
program.
-- The error_number is a negative integer with the range from -20999 to -20000.
       -- END IF;
-- END;
-- /
---Test du NO DELETE
-- DELETE FROM DEPT WHERE LOC='DALLAS';
-----EXERCICE N2-----
--Q1
CREATE OR REPLACE FUNCTION f_nb_cli(p_na IN NUMBER) RETURN NUMBER
       v_nb NUMBER:=0;
BEGIN
       SELECT COUNT( DISTINCT Num_Cli) INTO v_nb
       FROM compte WHERE num_agence=p_na;
       RETURN v_nb;
END;
--Test1 du FUNCTION f_nb_cli
ACCEPT s_na PROMPT 'DONNER LE NUMERO DE L AGENCE '
SELECT f_nb_cli(&s_na)from DUAL;
--Test2 du FUNCTION f nb cli
VARIABLE NCL NUMBER;
ACCEPT s_na PROMPT 'DONNER LE NUMERO DE L AGENCE '
BEGIN
:NCL:=f_nb_cli(&s_na);
END;
PRINT NCL
```

```
--Q2
SET SERVEROUTPUT ON
CREATE OR REPLACE PROCEDURE P_AFF
IS
      CURSOR c_ag IS SELECT num_agence, nom_agence, f_nb_cli(num_agence) nbr FROM agence;
      CURSOR c cl(p ag NUMBER) IS SELECT DISTINCT nom cli, ville cli FROM client c, compte co
      WHERE c.num_cli=co.num_cli AND num_agence=p_ag;
BEGIN
      FOR rec_ag IN c_ag LOOP
      DBMS_OUTPUT_LINE('-----');
             DBMS_OUTPUT_LINE('Agence : '||rec_ag.nom_agence);
             DBMS_OUTPUT_PUT_LINE('-----');
             DBMS OUTPUT.PUT LINE('Nom du Client
             DBMS_OUTPUT_LINE('----');
             FOR rec_cli IN c_cl(rec_ag.num_agence) LOOP
                   DBMS_OUTPUT.PUT_LINE(rec_cli.nom_cli||'
                                                         '||rec_cli.ville_cli);
             END LOOP:
             DBMS_OUTPUT_LINE('Nombre de clients : '||rec_ag.nbr);
             DBMS_OUTPUT_LINE('----');
      END LOOP;
END:
-- Test du PROCEDURE P_AFF
EXECUTE P_AFF;
--- -Q3
CREATE OR REPLACE TRIGGER T_NO_UP
BEFORE UPDATE ON compte
FOR EACH ROW
BEGIN
IF(USER!='SYSTEM') THEN
RAISE_APPLICATION_ERROR(-20002, Impossible de mettre pour un non SYSTEM...');
END IF:
END;
```

```
-----EXERCICE2--TD3
-- /*1*/
--SET SERVEROUTPUT ON
--DECLARE
 --CURSOR s_c IS SELECT sname FROM etudiant NATURAL JOIN inscription
  --WHERE corsno=102 AND note >= 10;
--BEGIN
--FOR s_r IN s_c LOOP
 --DBMS_OUTPUT.PUT_LINE(s_r.sname);
 --END LOOP:
--END;
--/
-- /*2*/
--ACCEPT s_cors PROMPT 'Numéro du cours'
--ACCEPT s_note PROMPT 'Seuil de la note'
--SET SERVEROUTPUT ON
--DECLARE
 --CURSOR s_c(p_note NUMBER, p_cors NUMBER) IS SELECT sname FROM etudiant NATURAL JOIN
  --WHERE corsno=p_cors AND note >= p_note;
       --BEGIN
 --FOR s_r IN s_c(&s_note,&s_cors) LOOP
  --DBMS_OUTPUT.PUT_LINE(s_r.sname);
 --END LOOP;
--END:
--/
-- /*3*/
ACCEPT s_cors PROMPT 'Numéro du cours'
ACCEPT s_note PROMPT 'Seuil de la note'
SET SERVEROUTPUT ON
DECLARE
 CURSOR s_c(p_note NUMBER, p_cors NUMBER) IS SELECT stdno, sname FROM etudiant NATURAL JOIN
inscription
  WHERE corsno=p_cors AND note >= p_note
  ORDER BY deptno DESC, stdno ASC;
 e_cz EXCEPTION;
BEGIN
 IF (&s cors=0) THEN
 RAISE e_cz;
 END IF;
 FOR s_r IN s_c(&s_note,&s_cors) LOOP
  DBMS OUTPUT.PUT LINE(s r.stdno||' ||s r.sname);
 END LOOP;
EXCEPTION
 WHEN e_cz THEN
  DBMS_OUTPUT.PUT_LINE('Le code du cours ne doit pas être égal à zéro');
END:
```