Création de la base dedonnées et contraintesd’intégrité

1.

CREATE TABLE DEPT

(

DEPTNO NUMBER(5) PRIMARY KEY NOT NULL,

DNAME VARCHAR(100),

LOC VARCHAR(100),

CONSTRAINT dname\_dept CHECK (DNAME IN('ACCOUNTING','RESEARCH','SALES','OPERATIONS'))

)

2.

INSERT INTO DEPT VALUES (10,'ACCOUNTING','NEW-YORK');

INSERT INTO DEPT VALUES (20,'RESEARCH','DALLAS');

INSERT INTO DEPT VALUES (30,'SALES','CHICAGO');

INSERT INTO DEPT VALUES (40,'OPERATIONS','BOSTON');

3.

CREATE TABLE EMP AS SELECT \* FROM SCOTT.EMP;

4.

INSERT INTO EMP VALUES(7369,'Bidon',NULL,NULL,NULL,NULL,NULL,NULL);

5.

ROLLBACK;

6.

ALTER TABLE EMP ADD CONSTRAINT emp\_pk PRIMARY KEY(EMPNO);

ALTER TABLE EMP ADD CONSTRAINT emp\_fk FOREIGN KEY (DEPTNO) REFERENCES DEPT(DEPTNO);

ALTER TABLE EMP ADD CONSTRAINT emp\_mg FOREIGN KEY(MGR) REFERENCES EMP(EMPNO);

7.

INSERT INTO EMP VALUES(7369, 'WILSON', 'MANAGER', 7839, '17-NOV-91', 3500.00, 600.00, 10);

INSERT INTO EMP VALUES(7657, 'WILSON','MANAGER', 7839, '17-NOV-91', 3500.00, 600.00, 50);

INSERT INTO EMP VALUES(7657, 'WILSON', 'MANAGER', 7000,'17-NOV-91', 3500.00, 600.00, 10);

INSERT INTO EMP VALUES(7657, 'WILSON', 'MANAGER', 7839, '17-NOV-91', 3500.00,600.00, 10);

\*\*\*\*On ne peut pas insérer l’employé ayant le numéro de departement 50 car il ce numéro n’est pas créer dans la table DEPT.\*\*\*\*\*

8.COMMIT ;

Mise à jour de la base de données

1.

UPDATE DEPT SET LOC='PITTSBURGH' WHERE DNAME='SALES';

2.

UPDATE EMP SET SAL=SAL\*1.1 WHERE COMM> Sal\*0.5;

3.

UPDATE EMP

SET COMM=(SELECT AVG(COMM) FROM EMP)

WHERE HIREDATE<'01-JAN-82' AND COMM IS NULL;

4.

ROLLBACK;

5.

DELETE FROM DEPT WHERE DEPTNO=20;

\*\*\* On ne peut pas le supprimer car

Interrogation de la base de données

1.

SELECT ename, sal, comm, sal+comm

FROM EMP

WHERE job='SALESMAN';

2.

SELECT ename

FROM EMP

ORDER BY COMM/SAL DESC;

3.

SELECT ename

FROM EMP

WHERE COMM<SAL\*0.25;

4.

SELECT COUNT(ENAME)

FROM EMP

WHERE DEPTNO=10;

5.

SELECT COUNT(ename)

FROM EMP

WHERE COMM IS NOT NULL;

6.

SELECT COUNT(DISTINCT JOB)

FROM EMP;

7.

SELECT JOB, AVG(SAL)

FROM EMP

GROUP BY JOB;

8.

SELECT SUM(SAL)

FROM EMP

WHERE DEPTNO=30;

9.

SELECT e.ENAME, d.DNAME

FROM EMP e, DEPT d

WHERE e.DEPTNO=d.DEPTNO;

10.

SELECT ENAME, JOB, SAL

FROM EMP

WHERE SAL= (SELECT MAX(SAL) FROM EMP);

11.

SELECT ENAME

FROM EMP

WHERE SAL>(SELECT SAL FROM EMP WHERE ENAME='JONES');

12.

SELECT ENAME

FROM EMP

WHERE JOB =(SELECT JOB FROM EMP WHERE ENAME='JONES')

AND ENAME <> 'JONES';

13.

SELECT ENAME

FROM EMP

WHERE MGR=(SELECT MGR FROM EMP WHERE ENAME='CLARCK')

AND ENAME <>'CLARCK';

14.

SELECT ENAME,JOB

FROM EMP

WHERE (JOB,MGR) IN (SELECT JOB,MGR FROM EMP WHERE ENAME='TURNER')

AND ENAME <>'CLARCK';

15.

SELECT ENAME,JOB

FROM EMP

WHERE HIREDATE < ALL(SELECT HIREDATE FROM EMP WHERE DEPTNO=10);

16.

SELECT mgr.ENAME,e.ENAME

FROM EMP e, EMP mgr

WHERE mgr.MGR=e.EMPNO;

17.

SELECT e.ENAME

FROM EMP e, EMP mgr

WHERE mgr.MGR=e.EMPNO AND mgr.DEPTNO<>e.DEPTNO;