1.

1. creation and insertion of table DEPT\_1102290 :

CREATE TABLE DEPT\_1102290(DEPTNO NUMBER(3) NOT NULL, DNAME VARCHAR(20) NOT NULL, LOC VARCHAR(20) NOT NULL);

BEGIN

INSERT INTO DEPT\_1102290(DEPTNO,DNAME,LOC) VALUES(10,'RESEARCH','HDC');

INSERT INTO DEPT\_1102290(DEPTNO,DNAME,LOC) VALUES(20,'SALES','BDC');

INSERT INTO DEPT\_1102290(DEPTNO,DNAME,LOC) VALUES(30,'COMPUTERS','CDC');

END;

1. creation and insertion of table EMP\_1102290 :

CREATE TABLE EMP\_1102290(EMPNO NUMBER(3) NOT NULL, ENAME VARCHAR(20), SAL NUMBER(5), COMM NUMBER(5), DEPTNO NUMBER(3));

BEGIN

INSERT INTO EMP\_1102290(EMPNO,ENAME,SAL,COMOM,DEPTNO) VALUES(101,'ANTHONY',6000,NULL,10);

INSERT INTO EMP\_1102290(EMPNO,ENAME,SAL,COMOM,DEPTNO) VALUES(102,'JOHN',7600,1000,10);

INSERT INTO EMP\_1102290(EMPNO,ENAME,SAL,COMOM,DEPTNO) VALUES(103,'ANDERSON',4500,NULL,20);

INSERT INTO EMP\_1102290(EMPNO,ENAME,SAL,COMOM,DEPTNO) VALUES(104,'KEVIN',2300,500,30);

END;

- -- - 2.

1. sequence for DEPTNO : CREATE SEQUENCE DEPTNO\_SEQ

MIN VALUE 10

MAX VALUE 30

START WITH 10

INCREAMENT BY 10

CACHE 0;

1. sequence for EMPNO :

CREATE SEQUENCE EMPNO\_SEQ MIN VALUE 101

MAX VALUE 104

START WITH 101

INCREAMENT BY 1

CACHE 0;

- - 3.

SELECT ENAME FROM EMP\_1102290

WHERE LOWER(ENAME) LIKE ('ANTHONY','JOHN') ( OR )

SELECT DEPTNO = 10 FROM EMP\_1102290 WHERE LOWER(ENAME)

- - 4.

creation of view :

CREATE VIEW MY\_VIEW AS

SELECT \*

FROM EMP\_1102290;

- - 5.

creation of synonym :

CREATE PUBLIC SYNONYM MY\_VIEW FOR HR\_INFO;

- - 6.

CREATE PACKAGE EMP\_PK

FUNCTION CHECK\_MAXSAL(NSAL EMP.SAL%TYPE) RETURN BOOLEAN; PROCEDURE INSERT\_TR(

VEMPNO EMP.EMPNO%TYPE,VENAME EMP.ENAME%TYPE,VSAL EMP.SAL%TYPE) IS BEGIN

SELECT CNT \*

INTO VCNT FROM EMP WHERE EMPNO=VEMPNO; IF VCNT=0 THEN

IF CHECK\_MAXSAL(VSAL) THEN

INSERT INTO EMP(EMPNO,ENAME,SAL) VALUES(VEMPNO,VENAME,VSAL); DBMS\_OUTPUT.PUT\_LINE(INSERT\_TR); ELSE

RAISE EXCEPTION('NSAL IS NOT MORE THAN MAXSAL); END IF;

ELSE

RAISE EXCEPTION(INSERTION DOESN'T HAPPEN BECAUSE EMPNO ALREADY EXIST); END IF;

COMMIT; END;

FUNCTION CHECK\_MAXSAL(NSAL EMP.SAL%TYPE) RETURN BOOLEAN; MAXSAL EMP.SAL%TYPE;

BEGIN

SELECT MAX(SAL) INTO MAXSAL FROM EMP; IF MAXSAL >= NSAL THEN

RETURN TRUE; ELSE

RETURN FALSE; END IF;

END;

PROCEDURE UPDATE\_TR(

VEMPNO EMP.EMPNO%TYPE,VENAME EMP.ENAME%TYPE,VSAL EMP.SAL%TYPE) IS BEGIN

SELECT CNT \*

INTO VCNT FROM EMP WHERE EMPNO=VEMPNO; IF VCNT>0 THEN

IF CHECK MAXSAL(VSAL) THEN

UPDATE EMP SET ENAME=VENAME,SAL=VSAL WHERE EMPNO=VEMPNO DBMS\_OUTPUT.PUT\_LINE('UPDATE\_TR'); ELSE

RAISE EXCEPTION('NSAL IS NOT MORE THAN MAXSAL); END IF;

ELSE

RAISE EXCEPTION('EMPNO DOESN'T EXIST); END IF;

COMMIT; END;

PROCEDURE DELETE\_TR(VEMPNO EMP.EMPNO%TYPE) IS BEGIN

SELECT CNT \*

INTO VCNT FROM EMP WHERE EMPNO=VEMPNO; IF VCNT>0 THEN

DELETE FROM EMP WHERE EMPNO=VEMPNO; DBMS\_OUTPUT.PUT\_LINE('DELETE\_TR');

ELSE

RAISE EXCEPTION('DELETION NOT APPLICABLE BECAUSE EMPNO DOESN'T EXIST'); END IF;

COMMIT; END; DECLARE

VDNAME EMP.DNAME%TYPE; VENAME EMP.ENAME%TYPE; BEGIN

SELECT DNAME,ENAME INTO VDNAME,VENAME FROM EMP;

WHERE DNAME=VDNAME AND ENAME=VENAME; DBMS\_OUTPUT.PUT\_LINE('RESOURCES' || DNAME); DBMS\_OUTPUT.PUT\_LINE("ANTHONY JOHN" || ENAME); DBMS\_OUTPUT.PUT\_LINE('SALES' || DNAME); DBMS\_OUTPUT.PUT\_LINE('ANDERSON' || ENAME); DBMS\_OUTPUT.PUT\_LINE('COMPUTERS' || DNAME); DBMS\_OUTPUT.PUT\_LINE('KEVIN' || ENAME);

END;