Lab 02

DS

IT21194962

Niyangoda S A N S H

CREATE TYPE dept\_t AS OBJECT(

deptno CHAR(3),

deptname VARCHAR2(36),

mgrno REF emp\_t,

admrdept REF emp\_t

);

CREATE TYPE emp\_t AS OBJECT(

Empno CHAR(6),

firstname VARCHAR2(12),

lastname VARCHAR2(15),

workdept REF dept\_t,

sex CHAR(1),

birthday DATE,

salary NUMBER(8,2)

);

CREATE TABLE ORDEPT OF dept\_t(

dept\_t PRIMARY KEY NOT NULL,

deptname NOT NULL

);

CREATE TABLE OREMP OF emp\_t(

empno PRIMARY KEY NOT NULL,

firstname NOT NULL,

lastname NOT NULL

);

INSERT INTO OREMP VALUES( emp\_t( 000010, 'Christine', 'Haas', NULL, 'F', TO\_DATE( '14-AUG-53', 'DD/MON/YY' ) , 72750 ) );

INSERT INTO OREMP VALUES( emp\_t( 000020, 'Michael', 'Thompson', NULL, 'M', TO\_DATE( '02-FEB-68', 'DD/MON/YY' ) , 61250 ) );

INSERT INTO OREMP VALUES( emp\_t( 000030, 'Sally', 'Kwan', NULL, 'F', TO\_DATE( '11-MAY-71', 'DD/MON/YY' ) , 58250 ) );

INSERT INTO OREMP VALUES( emp\_t( 000060, 'Irving', 'Stern', NULL, 'M', TO\_DATE( '07-JUL-65', 'DD/MON/YY' ) , 55555 ) );

INSERT INTO OREMP VALUES( emp\_t( 000070, 'Eva', 'Pulaski', NULL, 'F', TO\_DATE( '26-MAY-73', 'DD/MON/YY' ) , 56170 ) );

INSERT INTO OREMP VALUES( emp\_t( 000050, 'John', 'Geyer', NULL, 'M', TO\_DATE( '15-SEP-55', 'DD/MON/YY' ) , 60175 ) );

INSERT INTO OREMP VALUES( emp\_t( 000090, 'Eileen', 'Henderson', NULL, 'F', TO\_DATE( '15-MAY-61', 'DD/MON/YY' ) , 49750 ) );

INSERT INTO OREMP VALUES( emp\_t( 000100, 'Theodore', 'Spenser', NULL, 'M', TO\_DATE( '18-DEC-76', 'DD/MON/YY' ) , 46150 ) );

INSERT INTO ORDEPT VALUES( dept\_t( 'A00', 'SPIFFY COMPUTER SERVICE DIV.', NULL, NULL) );

INSERT INTO ORDEPT VALUES( dept\_t( 'B01', 'PLANNING', NULL, NULL ) );

INSERT INTO ORDEPT VALUES( dept\_t( 'C01', 'INFORMATION CENTER', NULL, NULL ) );

INSERT INTO ORDEPT VALUES( dept\_t( 'D01', 'DEVELOPMENT CENTER', NULL, NULL ) );

UPDATE ORDEPT

SET mgrno = ( SELECT REF(e) FROM OREMP e WHERE e.empno = 000010 )

WHERE dept\_t = 'A00'

UPDATE ORDEPT

SET mgrno = ( SELECT REF(e) FROM OREMP e WHERE e.empno = 000020 )

WHERE dept\_t = 'B01'

UPDATE ORDEPT

SET mgrno = ( SELECT REF(e) FROM OREMP e WHERE e.empno = 000030 )

WHERE dept\_t = 'C01'

UPDATE ORDEPT

SET mgrno = ( SELECT REF(e) FROM OREMP e WHERE e.empno = 000060 )

WHERE dept\_t = 'D01'

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'A00')

WHERE empno = 000010

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'B01')

WHERE empno = 000020

SELECT REF

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'C01')

WHERE empno = 000030

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'D01')

WHERE empno = 000060

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'D01')

WHERE empno = 000070

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'C01')

WHERE empno = 000050

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'B01')

WHERE empno = 000090

UPDATE OREMP

SET workdept = ( SELECT REF(d) FROM ORDEPT d WHERE d.dept\_t = 'B01')

WHERE empno = 000100

UPDATE ORDEPT

SET admrdept = ( SELECT REF(e) FROM OREMP e WHERE e.workdept.dept\_t = 'A00')

WHERE dept\_t = 'A00'

UPDATE ORDEPT

SET admrdept = ( SELECT REF(e) FROM OREMP e WHERE e.workdept.dept\_t = 'A00')

WHERE dept\_t = 'B01'

UPDATE ORDEPT

SET admrdept = ( SELECT REF(e) FROM OREMP e WHERE e.workdept.dept\_t = 'A00')

WHERE dept\_t = 'C01'

UPDATE ORDEPT

SET admrdept = ( SELECT REF(e) FROM OREMP e WHERE e.empno = '000060')

WHERE dept\_t = 'D01'

2.a

SELECT d.dept\_name, d.mgrno.l\_name FROM ORDEPT d

2.b

SELECT e.empno, e.l\_name, e.workdept.dept\_name AS Department

FROM OREMP e

2.c

SELECT d.dept\_t AS Department Number, d.dept\_name AS Department Name, d.admrdept.dept\_name FROM ORDEPT d

2.e

SELECT e.empno AS Employee Number, e.f\_name AS First Name, e.l\_name AS Last Name, e.salary AS Salary, e.workdept.dept\_name AS Department, FROM OREMP e