CREATE DATABASE 1101003610\_skilaverkefni2;

USE 1101003610\_skilaverkefni2;

SET AUTOCOMMIT = 0;

CREATE TABLE EMPLOYEE(

EMP\_NUM CHAR(3),

EMP\_LNAME VARCHAR(30),

EMP\_FNAME VARCHAR(30),

EMP\_INITIAL CHAR(1),

EMP\_HIREDATE DATE,

JOB\_CODE CHAR(3),

EMP\_YEAR VARCHAR(2)

);

CREATE TABLE PROJECT(

PROJ\_NUM CHAR(2),

PROJ\_NAME VARCHAR(30),

PROJ\_VALUE DECIMAL(10,2),

PROJ\_BALANCE DECIMAL(10,2),

EMP\_NUM CHAR(3)

);

CREATE TABLE ASSIGNMENT (

ASSIGN\_NUM CHAR(4),

ASSIGN\_DATE DATE,

PROJ\_NUM CHAR(2),

EMP\_NUM CHAR(3),

ASSIGN\_JOB CHAR(3),

ASSIGN\_CHG\_HR DECIMAL(6,2),

ASSIGN\_HOURS DECIMAL(3,2),

ASSIGN\_CHARGE DECIMAL(6,2)

);

CREATE TABLE JOB(

JOB\_CODE CHAR(3),

JOB\_DESCRIPTION VARCHAR(30),

JOB\_CHG\_HOUR DECIMAL(5,2),

JOB\_LAST\_UPDATE DATE

);

INSERT INTO EMPLOYEE

VALUES

('101', 'News', 'John', 'G', '2000-08-08', '502', '4'),

('102', 'Senior', 'David', 'H', '1989-07-12', '501', '15'),

('103', 'Arbough', 'June', 'E', '1996-12-01', '503', '8'),

('104', 'Ramoras', 'Anne', 'K', '1987-11-15', '501', '17'),

('105', 'Johnson', 'Alice', 'K', '1993-02-01', '502', '12'),

('106', 'Smithﬁeld', 'William', '', '2004-06-22', '500', '0'),

('107', 'Alonzo', 'Maria', 'D', '1993-10-10', '500', '11'),

('108', 'Washington', 'Ralph', 'E', '1991-08-22', '501', '13'),

('109', 'Smith', 'Larry', 'W', '1997-06-18', '501', '7'),

('110', 'Olenko', 'Gerald', 'A', '1995-12-11', '505', '9'),

('111', 'Wabash', 'Geoff', 'B', '1991-04-04', '506', '14'),

('112', 'Smithson', 'Darlene', 'M', '1994-10-23', '507', '10'),

('113', 'Joenbrood', 'Delbert', 'K', '1996-11-15', '508', '8'),

('114', 'Jones', 'Annelise', '', '1993-08-20', '508', '11'),

('115', 'Bawangi', 'Travis', 'B', '1992-01-25', '501', '13'),

('116', 'Pratt', 'Gerald', 'L', '1997-03-05', '510', '8'),

('117', 'Williamson', 'Angie', 'H', '1996-07-19', '509', '8'),

('118', 'Frommer', 'James', 'J', '2005-01-05', '510', '0');

INSERT INTO JOB

VALUES

('500', 'Programmer', 35.75, '2006-11-20'),

('501', 'Systems Analyst', 96.75, '2006-11-20'),

('502', 'Database Designer', 125.0, '2007-03-24'),

('503', 'Electrical Engineer', 84.50, '2007-11-20'),

('504', 'Mechanical Engineer', 67.90, '2007-11-20'),

('505', 'Civil Engineer', 55.78, '2007-11-20'),

('506', 'Clerical Support', 26.87, '2007-11-20'),

('507', 'DSS Analyst', 45.95, '2007-11-20'),

('508', 'Applications Designer', 48.10, '2007-03-24'),

('519', 'Bio Technician', 34.55, '2006-11-20'),

('510', 'General Support', 18.36, '2006-11-20');

INSERT INTO PROJECT

VALUES

('15', 'Evergreen', 1453500.00, 1002350.00, '103'),

('18', 'Amber Wave', 3500500.00, 2110346.00, '108'),

('22', 'Rolling Tide', 805000.00, 500345.20, '102'),

('25', 'Starflight', 2650500.00, 2309880.00, '107');

INSERT INTO ASSIGNMENT

VALUES

('1001', '2007-03-22', '18', '103', '503', 84.50, 3.5, 295.75),

('1002', '2007-03-22', '22', '117', '509', 34.55, 4.2, 145.11),

('1003', '2007-03-22', '18', '117', '509', 34.55, 2.0, 69.10),

('1004', '2007-03-22', '18', '103', '503', 84.50, 5.9, 498.55),

('1005', '2007-03-22', '25', '108', '501', 96.75, 2.2, 212.85),

('1006', '2007-03-22', '22', '104', '501', 96.75, 4.2, 406.35),

('1007', '2007-03-22', '25', '113', '508', 50.75, 3.8, 192.85),

('1008', '2007-03-22', '18', '103', '503', 84.50, 0.9, 76.05),

('1009', '2007-03-23', '15', '115', '501', 96.75, 5.6, 541.80),

('1010', '2007-03-23', '15', '117', '509', 34.55, 2.4, 82.92),

('1011', '2007-03-23', '25', '105', '502', 105.00, 4.3, 451.50),

('1012', '2007-03-23', '18', '108', '501', 96.75, 3.4, 328.95),

('1013', '2007-03-23', '25', '115', '501', 96.75, 2.0, 193.50),

('1014', '2007-03-23', '22', '104', '501', 96.75, 2.8, 270.90),

('1015', '2007-03-23', '15', '103', '503', 84.50, 6.1, 515.45),

('1016', '2007-03-23', '22', '105', '502', 105.00, 4.7, 493.50),

('1017', '2007-03-23', '18', '117', '509', 34.55, 3.8, 131.29),

('1018', '2007-03-23', '25', '117', '509', 34.55, 2.2, 76.01),

('1019', '2007-03-24', '25', '104', '501', 110.50, 4.9, 541.45),

('1020', '2007-03-24', '15', '101', '502', 125.00, 3.1, 387.50),

('1021', '2007-03-24', '22', '108', '501', 110.50, 2.7, 298.35),

('1022', '2007-03-24', '22', '115', '501', 110.50, 4.9, 541.45),

('1023', '2007-03-24', '22', '105', '502', 125.00, 3.5, 437.50),

('1024', '2007-03-24', '15', '103', '503', 84.50, 3.3, 278.85),

('1025', '2007-03-24', '18', '117', '509', 34.55, 4.2, 145.11);

1.

CREATE TABLE EMP\_1(

EMP\_NUM CHAR(3),

EMP\_LNAME VARCHAR(15),

EMP\_FNAME VARCHAR(15),

EMP\_INITIAL CHAR(1),

EMP\_HIREDATE DATE,

JOB\_CODE CHAR(3)

);

2.

INSERT INTO EMP\_1

VALUES

('101', 'News', 'John', 'G', '2000-11-08', '502'),

('102', 'Senior', 'David', 'H', '1989-07-12', '501');

INSERT INTO EMP\_1

VALUES

('103', 'Arbough', 'June', 'E', '1996-12-01', '500'),

('104', 'Ramoras', 'Anne', 'K', '1987-11-15', '501'),

('105', 'Johnson', 'Alice', 'K', '1993-02-01', '502'),

('106', 'Smithfield', 'William', '', '2004-06-22','500'),

('107', 'Alonzo', 'Maria', 'D', '1993-10-10', '500'),

('108', 'Washington', 'Ralph', 'B', '1991-08-22', '501'),

('109', 'Smith', 'Larry', 'W', '1997-07-18', '501');

3.

SELECT \* FROM EMP\_1

WHERE JOB\_CODE = '502';

4.

COMMIT;

5.

UPDATE EMP\_1

SET JOB\_CODE = '501'

WHERE EMP\_NUM = '107';

SELECT \* FROM EMP\_1

WHERE EMP\_NUM = '107';

UPDATE EMP\_1

SET JOB\_CODE = '500'

WHERE EMP\_NUM = '107';

6.

DELETE FROM EMP\_1

WHERE EMP\_LNAME = 'Smithfield' AND EMP\_FNAME = 'William' AND EMP\_HIREDATE = '2004-06-22' AND JOB\_CODE = '500';

7.

ROLLBACK;

8.

CREATE TABLE EMP\_2

AS SELECT \* FROM EMP\_1;

ALTER TABLE EMP\_2

ADD EMP\_PCT DECIMAL(4,2), ADD PROJ\_NUM INT;

9.

UPDATE EMP\_2

SET EMP\_PCT = 3.85

WHERE EMP\_NUM = '103'

UPDATE EMP\_2

SET EMP\_PCT = 5.00

WHERE EMP\_NUM = '101' OR EMP\_NUM = '105';

UPDATE EMP\_2

SET EMP\_PCT = 8.00

WHERE EMP\_NUM = '102';

UPDATE EMP\_2

SET EMP\_PCT = 10.00

WHERE EMP\_NUM = '104' OR EMP\_NUM = '108';

UPDATE EMP\_2

SET EMP\_PCT = 6.20

WHERE EMP\_NUM = '106';

UPDATE EMP\_2

SET EMP\_PCT = 5.15

WHERE EMP\_NUM = '107';

UPDATE EMP\_2

SET EMP\_PCT = 2.00

WHERE EMP\_NUM = '109';

10.

UPDATE EMP\_2

SET PROJ\_NUM = '18'

WHERE JOB\_CODE = '500';

11.

UPDATE EMP\_2

SET PROJ\_NUM = '25'

WHERE JOB\_CODE >= '502';

COMMIT;

12.

UPDATE EMP\_2

SET PROJ\_NUM = '14'

WHERE EMP\_HIREDATE < '1994-01-01' AND JOB\_CODE <= '501';

ROLLBACK;

13.

-- A --

CREATE TABLE TEMP\_1

AS SELECT EMP\_PCT, PROJ\_NUM FROM EMP\_2 WHERE 1=0;

-- B –

INSERT INTO TEMP\_1

SELECT EMP\_PCT, PROJ\_NUM

FROM EMP\_2;

14.

DROP TABLE table\_name;

15.

SELECT \* FROM EMP\_2

WHERE EMP\_LNAME LIKE 'Smith%';

16.

SELECT p.PROJ\_NAME, p.PROJ\_VALUE, p.PROJ\_BALANCE, e.EMP\_LNAME, e.EMP\_FNAME, e.EMP\_INITIAL, j.JOB\_CODE, j.JOB\_DESCRIPTION, j.JOB\_CHG\_HOUR

FROM PROJECT p, EMPLOYEE e, JOB j

WHERE e.EMP\_NUM = p.EMP\_NUM

AND j.JOB\_CODE = e.JOB\_CODE

ORDER BY PROJ\_VALUE;

17.

CREATE VIEW REP\_1 AS

SELECT p.PROJ\_NAME, p.PROJ\_VALUE, p.PROJ\_BALANCE, e.EMP\_LNAME, e.EMP\_FNAME, e.EMP\_INITIAL, j.JOB\_CODE, j.JOB\_DESCRIPTION, j.JOB\_CHG\_HOUR

FROM PROJECT p, EMPLOYEE e, JOB j

WHERE e.EMP\_NUM = p.EMP\_NUM

AND j.JOB\_CODE = e.JOB\_CODE

ORDER BY PROJ\_VALUE;

18.

SELECT AVG(EMP\_PCT) AS 'Average\_Bonus\_Percentage' FROM EMP\_2;

19.

SELECT \* FROM EMP\_2

ORDER BY EMP\_PCT;

20.

SELECT PROJ\_NUM FROM EMP\_2

WHERE PROJ\_NUM IS NOT NULL;

21.

SELECT ASSIGN\_CHG\_HR \* ASSIGN\_HOURS AS ASSIGN\_CHARGE

FROM ASSIGNMENT

22.

SELECT a.EMP\_NUM, e.EMP\_LNAME, SUM(a.ASSIGN\_HOURS) AS SumOfASSIGN\_HOURS, SUM(a.ASSIGN\_CHARGE) AS SumOfASSIGN\_CHARGE

FROM EMPLOYEE e, ASSIGNMENT a

WHERE e.EMP\_NUM = a.EMP\_NUM

GROUP BY a.EMP\_NUM, e.EMP\_LNAME;

23.

SELECT PROJ\_NUM, SUM(ASSIGN\_HOURS) AS SumOfASSIGN\_HOURS, SUM(ASSIGN\_CHARGE) AS SumOfASSIGN\_CHARGE

FROM ASSIGNMENT

GROUP BY PROJ\_NUM;

24.

SELECT SUM(ASSIGN\_HOURS) AS SumOfSumOfASSIGN\_HOURS, SUM(ASSIGN\_CHARGE) AS SumOfSumOfASSIGN\_CHARGE

FROM ASSIGNMENT;

25.

SELECT SUM(ASSIGN\_HOURS) AS SumOfSumOfASSIGN\_HOURS, SUM(ASSIGN\_CHARGE) AS SumOfSumOfASSIGN\_CHARGE

FROM ASSIGNMENT

ORDER BY PROJ\_NUM;

COMMIT;