create database prac\_11;

use prac\_11;

CREATE TABLE departments (

dep\_id INT PRIMARY KEY,

dep\_name VARCHAR(50),

dep\_location VARCHAR(50)

);

CREATE TABLE employees (

emp\_id INT PRIMARY KEY,

emp\_name VARCHAR(50),

job\_name VARCHAR(50),

manager\_id INT,

hire\_date DATE,

salary DECIMAL(10, 2),

commission DECIMAL(10, 2),

dep\_id INT,

FOREIGN KEY (dep\_id) REFERENCES departments(dep\_id)

);

CREATE TABLE salary\_grades (

grade INT PRIMARY KEY,

min\_sal INT,

max\_sal INT

);

INSERT INTO departments (dep\_id, dep\_name, dep\_location) VALUES

(1001, 'FINANCE', 'SYDNEY'),

(2001, 'AUDIT', 'MELBOURNE'),

(3001, 'MARKETING', 'PERTH'),

(4001, 'PRODUCTION', 'BRISBANE');

INSERT INTO employees (emp\_id, emp\_name, job\_name, manager\_id, hire\_date, salary, commission, dep\_id) VALUES

(68319, 'KAYLING', 'PRESIDENT', NULL, '1991-11-18', 6000.00, NULL, 1001),

(66928, 'BLAZE', 'MANAGER', 68319, '1991-05-01', 2750.00, NULL, 3001),

(67832, 'CLARE', 'MANAGER', 68319, '1991-06-09', 2550.00, NULL, 1001),

(65646, 'JONAS', 'MANAGER', 68319, '1991-04-02', 2957.00, NULL, 2001),

(67858, 'SCARLET', 'ANALYST', 65646, '1997-04-19', 3100.00, NULL, 2001),

(69062, 'FRANK', 'ANALYST', 65646, '1991-12-03', 3100.00, NULL, 2001),

(63679, 'SANDRINE', 'CLERK', 69062, '1990-12-18', 900.00, NULL, 2001),

(64989, 'ADELYN', 'SALESMAN', 66928, '1991-02-20', 1700.00, 400.00, 3001),

(65271, 'WADE', 'SALESMAN', 66928, '1991-02-22', 1350.00, 600.00, 3001),

(66564, 'MADDEN', 'SALESMAN', 66928, '1991-09-28', 1350.00, 1500.00, 3001),

(68454, 'TUCKER', 'SALESMAN', 66928, '1991-09-08', 1600.00, 0.00, 3001),

(68736, 'ADNESS', 'CLERK', 67858, '1997-05-23', 1200.00, NULL, 2001),

(69000, 'JULIUS', 'CLERK', 66928, '1991-12-03', 1050.00, NULL, 3001),

(69324, 'MARKER', 'CLERK', 67832, '1992-01-23', 1400.00, NULL, 1001);

INSERT INTO salary\_grades (grade, min\_sal, max\_sal) VALUES

(1, 800, 1300),

(2, 1301, 1500),

(3, 1501, 2100),

(4, 2101, 3100),

(5, 3101, 9999);

select \* from salary\_grades;

select \* from employees;

select \* from departments;

-- 1

SELECT \*

FROM employees

WHERE salary BETWEEN (SELECT min\_sal FROM salary\_grades WHERE grade = 4) AND (SELECT max\_sal FROM salary\_grades WHERE grade = 5)

AND job\_name IN ('ANALYST', 'MANAGER');

-- 2

SELECT \*

FROM employees

WHERE salary > (SELECT salary FROM employees WHERE emp\_name = 'JONAS');

-- 3

SELECT \*

FROM employees

WHERE job\_name = (SELECT job\_name FROM employees WHERE emp\_name = 'FRANK');

-- 4

SELECT \*

FROM employees

WHERE dep\_id = 2001 AND job\_name IN (SELECT job\_name FROM employees WHERE dep\_id = 1001);

-- 5

SELECT \*

FROM employees

WHERE salary IN(SELECT salary FROM employees WHERE emp\_name IN ('FRANK','SCARLET'))

ORDER BY salary DESC;

-- 6

SELECT \*

FROM employees

WHERE job\_name = (SELECT job\_name FROM employees WHERE emp\_name = 'MARKER')

OR salary > (SELECT salary FROM employees WHERE emp\_name = 'ADELYN');

-- 7

SELECT \*

FROM employees

WHERE hire\_date < (SELECT hire\_date FROM employees WHERE emp\_name = 'BLAZE')

AND dep\_id IN (SELECT dep\_id FROM departments WHERE dep\_location IN ('PERTH', 'BRISBANE'));

-- 8

SELECT \*

FROM employees

WHERE dep\_id = (SELECT dep\_id FROM departments WHERE dep\_name = 'MARKETING')

AND salary = (SELECT MAX(salary) FROM employees WHERE dep\_id = (SELECT dep\_id FROM departments WHERE dep\_name = 'MARKETING'));

-- 9

SELECT e.\*

FROM employees e

JOIN departments d ON e.dep\_id = d.dep\_id

WHERE d.dep\_location = 'PERTH'

AND e.salary BETWEEN (SELECT min\_sal FROM salary\_grades WHERE grade = 3) AND (SELECT max\_sal FROM salary\_grades WHERE grade = 3)

AND e.hire\_date = (

SELECT MAX(hire\_date)

FROM employees e2

JOIN departments d2 ON e2.dep\_id = d2.dep\_id

WHERE d2.dep\_location = 'PERTH'

AND e2.salary BETWEEN (SELECT min\_sal FROM salary\_grades WHERE grade = 3) AND (SELECT max\_sal FROM salary\_grades WHERE grade = 3)

);

-- 10

SELECT e.\*

FROM employees e

WHERE e.manager\_id = (SELECT emp\_id FROM employees WHERE emp\_name = 'KAYLING')

AND e.salary BETWEEN (SELECT min\_sal FROM salary\_grades WHERE grade > 3) AND (SELECT max\_sal FROM salary\_grades WHERE grade > 3)

AND e.hire\_date = (

SELECT MIN(hire\_date)

FROM employees e2

WHERE e2.manager\_id = (SELECT emp\_id FROM employees WHERE emp\_name = 'KAYLING')

AND e2.salary BETWEEN (SELECT min\_sal FROM salary\_grades WHERE grade > 3) AND (SELECT max\_sal FROM salary\_grades WHERE grade > 3)

);