**OTHER MYSQL PRACTISE**

**Company Database Code:**

CREATE TABLE employee(

emp\_id INT PRIMARY KEY,

first\_name VARCHAR(20),

last\_name VARCHAR(20),

birth\_date DATE,

sex VARCHAR(1),

salary INT,

super\_id INT,

branch\_id INT

);

CREATE TABLE branch(

branch\_id INT PRIMARY KEY,

branch\_name VARCHAR(20),

mgr\_id INT,

mgr\_start\_date DATE,

FOREIGN KEY(mgr\_id) REFERENCES employee(emp\_id) ON DELETE SET NULL

);

DESCRIBE branch;

ALTER TABLE employee

ADD CONSTRAINT super\_id

FOREIGN KEY(super\_id) REFERENCES employee(emp\_id) ON DELETE SET NULL;

ALTER TABLE employee

ADD CONSTRAINT branch\_id

FOREIGN KEY(branch\_id) REFERENCES branch(branch\_id) ON DELETE SET NULL;

DESCRIBE branch;

CREATE TABLE client(

client\_id INT PRIMARY KEY,

client\_name VARCHAR(20),

branch\_id INT,

FOREIGN KEY(branch\_id) REFERENCES branch(branch\_id)

);

CREATE TABLE works\_with(

emp\_id INT,

client\_id INT,

total\_sales INT,

PRIMARY KEY(emp\_id, client\_id),

FOREIGN KEY(emp\_id) REFERENCES employee(emp\_id) ON DELETE CASCADE,

FOREIGN KEY(client\_id) REFERENCES client(client\_id) ON DELETE CASCADE

);

CREATE TABLE branch\_supplier(

branch\_id INT,

supplier\_name VARCHAR(20),

supply\_type VARCHAR(20)

);

DESCRIBE employee;

DESCRIBE client;

DESCRIBE works\_with;

DESCRIBE branch\_supplier;

INSERT INTO employee VALUES (100,'David','Wallace', '1967-11-17','M',25000, NULL, NULL);

SELECT \* FROM employee;

INSERT INTO branch VALUES(1,'Corporate', 100, '2006-02-09');

SELECT \* FROM branch;

UPDATE employee

SET branch\_id = 1

WHERE emp\_id =100;

SELECT \* FROM employee;

INSERT INTO employee VALUES(101,'Jan','Levinson','1961-05-11','F',110000,100,1);

INSERT INTO employee VALUES(102,'Michael','Scott','1964-03-15','M',75000,100,NULL);

INSERT INTO branch VALUES (2,'Scranton', 102, '1992-04-06');

SELECT \* FROM employee;

UPDATE employee

SET branch\_id=2

WHERE emp\_id=102;

INSERT INTO employee VALUES (103,'Angela','Martin', '1967-06-25', 'F', 63000, 102,2);

INSERT INTO employee VALUES (104, 'Kelly','Kapoor', '1980-02-05','F', 55000,102,2);

INSERT INTO employee VALUES (105,'Stanley', 'Hudson', '1958-02-19','M', 69000, 102,2);

INSERT INTO employee VALUES (106, 'Josh', 'Porter', '1969-09-05', 'M', 78000, 100, NULL);

INSERT INTO branch VALUES (3, 'Stamford', 106, '1998-02-13');

UPDATE employee

SET branch\_id = 3

WHERE emp\_id = 106;

INSERT INTO employee VALUES(107, 'Andy','Bernard','1973-07-22','M', 65000,106,3);

INSERT INTO employee VALUES (108, 'Jim', 'Halpert','1978-10-01', 'M', 71000, 106,3);

SELECT \* FROM employee;

SELECT \* FROM branch;

INSERT INTO client VALUES (400,'Dunmore Highschool',2);

INSERT INTO client VALUES (401,'Lackawana County',2);

INSERT INTO client VALUES (402,'FedEx',3);

INSERT INTO client VALUES (403,'John Daly Law, LLC',3);

INSERT INTO client VALUES (404,'Scranton Whitepages',2);

INSERT INTO client VALUES (405,'Times Newspaper',3);

INSERT INTO client VALUES (406,'FedEx',2);

SELECT \* FROM client;

INSERT INTO works\_with VALUES(105,400,55000);

INSERT INTO works\_with VALUES(102,401,267000);

INSERT INTO works\_with VALUES(108,402,22500);

INSERT INTO works\_with VALUES(107,403,5000);

INSERT INTO works\_with VALUES(108,403,22500);

INSERT INTO works\_with VALUES(105,404,33000);

INSERT INTO works\_with VALUES(107,405,26000);

INSERT INTO works\_with VALUES(102,406,15000);

INSERT INTO works\_with VALUES(105,406,15000);

INSERT INTO branch\_supplier VALUES(2,'Hammer Mill', 'Paper');

INSERT INTO branch\_supplier VALUES(2,'Uni Ball', 'Writting Utensils');

INSERT INTO branch\_supplier VALUES(3,'Patriot Paper', 'Paper');

INSERT INTO branch\_supplier VALUES(2,'J.T.Forms & Labels', 'Custom Forms');

INSERT INTO branch\_supplier VALUES(3,'Uni\_ball', 'Writting Utensils');

INSERT INTO branch\_supplier VALUES(3,'Hammer Mill', 'Paper');

INSERT INTO branch\_supplier VALUES(3,'Stamford Lables','Custom Forms');

SELECT \* FROM employee;

SELECT \* FROM client;

SELECT \* FROM works\_with;

SELECT \* from branch\_supplier;

SELECT \* FROM employee;

SELECT \* FROM employee;

SELECT \* FROM client;

SELECT \* FROM

employee

ORDER BY salary;

SELECT \* FROM

employee

ORDER BY salary DESC;

SELECT \* FROM

employee

ORDER BY sex, first\_name, last\_name;

SELECT \* FROM

employee

ORDER BY sex, first\_name, last\_name;

SELECT \* FROM

employee

LIMIT 5;

SELECT first\_name, last\_name

FROM employee;

SELECT first\_name AS forename, last\_name AS surname

FROM employee;

SELECT DISTINCT sex

FROM employee;

SELECT DISTINcT branch\_id

FROM employee;

SELECT COUNT(emp\_id)

FROM employee;

SELECT COUNT(emp\_id),sex

FROM employee

GROUP BY sex;

SELECT COUNT(emp\_id)

FROM employee;

SELECT COUNT(emp\_id), sex

FROM employee

group by sex;

SELECT COUNT(emp\_id), sex

FROM employee

GROUP BY sex;

SELECT COUNT(super\_id)

FROM employee;

SELECT \* FROM

employee

WHERE birth\_date >= 1970-01-01;

SELECT \* FROM employee;

SELECT first\_name

FROM employee

WHERE sex = 'F' and birth\_date >= '1979-01-01';

SELECT AVG(salary)

FROM employee;

SELECT AVG(salary)

FROM employee

WHERE sex= 'm';

SELECT SUM(salary)

FROM employee;

SELECT COUNT(emp\_id), sex

FROM employee

GROUP BY sex;

SELECT \* FROM works\_with;

SELECT total\_sales

FROM works\_with;

SELECT SUM(total\_sales), emp\_id

FROM works\_with

GROUP BY emp\_id;

SELEct SUM(total\_sales),client\_id

FROM works\_with

GROUP by client\_id;

SELECT \* FROM

client

WHERE client\_name LIKE '%LLC%';

SELECT \* FROM

employee

WHERE birth\_date LIKE '\_\_\_\_-02%';

SELECT \* FROM

employee

WHERE birth\_date like '\_\_\_\_-02%';

SELECT first\_name

FROM employee

UNION

select branch\_name

FROM branch;

SELECT first\_name AS company

FROM employee

UNION

SELECT branch\_name

FROM branch

UNION

SELECT client\_name

FROM client;

SELECT client\_name

FROM client

UNION

SELECT supplier\_name

FROM branch\_supplier;

SELECT client\_name

FROM client

UNION

select supplier\_name

FROM branch\_supplier;

SELECT client\_name, branch\_id

FROM client

UNION

SELECT supplier\_name, branch\_id

FROM branch\_supplier;

INSERT INTO branch VALUES(4,'Buffalo', NULL,NULL);

SELECT \* FROM branch;

SELECT employee.emp\_id, employee.first\_name, branch.branch\_name

FROM employee

JOIN branch

ON employee.emp\_id = branch.mgr\_id;

SELECT employee.emp\_id, employee.first\_name, branch.branch\_name

FROM employee

JOIN branch

ON employee.emp\_id = branch.mgr\_id;

SELECT employee.emp\_id, employee.first\_name, branch.branch\_name

FROM employee

JOIN branch

ON employee.emp\_id = branch.mgr\_id;

SELECT employee.emp\_id, employee.first\_name, branch.branch\_name

FROM employee

RIGHT JOIN branch

ON employee.emp\_id= branch.mgr\_id;

SELECT employee.emp\_id, employee.first\_name, branch.branch\_name

FROM employee

JOIN branch

ON employee.emp\_id = branch.mgr\_id;

SELECT employee.emp\_id,employee.first\_name,branch.branch\_name

FROM employee

JOIN branch

ON employee.emp\_id = branch.mgr\_id;

SELECT \* FROM

employee

WHERE emp\_id IN

(SELECT emp\_id

FROM works\_with

WHERE total\_sales>30000);

SELECT employee.first\_name, employee.last\_name

FROM employee

WHERE emp\_id IN

(SELECT emp\_id

FROM works\_with

WHERE total\_sales > 30000);

SELECT client.client\_name

FROM client

WHERE client\_id IN

(SELECT branch.branch\_name

FROM branch

WHERE branch.mgr\_id = 102);

SELECT client.client\_name

FROM client

WHERE client.branch\_id =(SELECT branch.branch\_id

FROM branch

WHERE branch.mgr\_id = 102);