

MI 1.02: Report #3

Due on Tuesday, November 7, 2017

Nghiem Thi Phuong 5:30pm

Cao Anh Quan

Problem 1

1. All info of all employees

```
INSERT INTO departments VALUES ('d010', 'Research and Development');
INSERT INTO departments VALUES ('d011', 'Marketing and Sales');

UPDATE IGNORE dept_emp
5 SET dept_no = 'd010'
  WHERE dept_no = 'd005' OR dept_no = 'd008';
UPDATE IGNORE dept_emp
  SET dept_no = 'd011'
  WHERE dept_no = 'd001' OR dept_no = 'd007';
10
UPDATE IGNORE dept_manager
  SET dept_no = 'd010'
  WHERE dept_no = 'd005' OR dept_no = 'd008';
UPDATE IGNORE dept_manager
15 SET dept_no = 'd011'
  WHERE dept_no = 'd001' OR dept_no = 'd007';

DELETE FROM departments
  WHERE dept_no = 'd005' OR dept_no = 'd008' OR dept_no = 'd001' OR dept_no = 'd007';
```

2. All info of all departments

```
SELECT * FROM departments;
```

3. Full names of all employees

```
SELECT concat(first_name, ' ', last_name) as full_name FROM employees;
```

4. Names of all departments

```
SELECT dept_name FROM departments;
```

5. Full names of employees working in "Sales" department

```
SELECT concat(first_name, ' ', last_name) as full_name
  FROM employees
  JOIN dept_emp ON employees.emp_no = dept_emp.emp_no
  JOIN departments ON dept_emp.dept_no = departments.dept_no
5  WHERE dept_name = 'Sales';
```

6. Full names of male employees working in "Finance" department

```
SELECT concat(first_name, ' ', last_name) as full_name
  FROM employees
  JOIN dept_emp ON employees.emp_no = dept_emp.emp_no
  JOIN departments ON dept_emp.dept_no = departments.dept_no
5  WHERE gender = 'M' AND dept_name = 'Finance';
```

7. Salaries of female employees working in "Marketing" department

5

```
SELECT employees.emp_no, salary
FROM employees
JOIN dept_emp ON employees.emp_no = dept_emp.emp_no
JOIN departments ON dept_emp.dept_no = departments.dept_no
JOIN salaries ON employees.emp_no = salaries.emp_no
WHERE gender = 'F' AND dept_name = 'Marketing';
```

8. Full names of employees who have the same last name as their manager

```
SELECT emp.full_name
FROM
  (SELECT
    concat(first_name, ' ', last_name) AS full_name,
    last_name,
    employees.emp_no AS empno
  FROM employees
  JOIN dept_emp ON employees.emp_no = dept_emp.emp_no) AS emp
JOIN (SELECT
  last_name,
  employees.emp_no AS empno
  FROM employees
  JOIN dept_manager ON employees.emp_no = dept_manager.emp_no) AS man
ON emp.last_name = man.last_name;
```

9. Full names of managers who have been doing the job at least twice (use name g Count()(R) to count)

```
SELECT concat(first_name, ' ', last_name) AS full_name
FROM employees
JOIN
  (SELECT emp_no
  FROM dept_manager
  GROUP BY emp_no
  HAVING count(*) > 1) AS R2 ON R2.emp_no = employees.emp_no;
```

10. Full names of employees who was paid more than \$100000

```
SELECT concat(first_name, ' ', last_name) AS full_name
FROM employees
  JOIN salaries ON employees.emp_no = salaries.emp_no
WHERE salary > 100000;
```

11. Names of all departments that have employees paid more than \$100000

```
(SELECT dept_name
FROM departments
  JOIN dept_emp ON departments.dept_no = dept_emp.dept_no
  JOIN salaries ON dept_emp.emp_no = salaries.emp_no
WHERE salary > 100000)
UNION
(SELECT dept_name
FROM departments
  JOIN dept_manager ON departments.dept_no = dept_manager.dept_no
  JOIN salaries ON salaries.emp_no = dept_manager.emp_no
WHERE salary > 100000);
```