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Subject: DBSL – Assignment 06

Code:

```
CREATE TABLE new_emps(
    emp_id INT PRIMARY KEY NOT NULL,
    emp_name VARCHAR(200)
);

CREATE TABLE old_emps(
    emp_id INT PRIMARY KEY NOT NULL,
    emp_name VARCHAR(200)
);

INSERT INTO old_emps(emp_id, emp_name)
VALUES (1, 'Natasha'), (2, 'Tony'), (3, 'Steve');

INSERT INTO new_emps(emp_id, emp_name)
VALUES (4, 'Peter'), (5, 'Vision'), (3, 'Steve');

DELIMITER //

CREATE PROCEDURE update_old()
BEGIN
    DECLARE done INT DEFAULT FALSE;
    DECLARE cur_emp_id INT;
    DECLARE cur_emp_name VARCHAR(200);

    DECLARE cur CURSOR FOR
    SELECT emp_id, emp_name FROM new_emps WHERE emp_id NOT IN (SELECT e
mp_id FROM old_emps);

    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;

    OPEN cur;

    emp_loop: LOOP
        FETCH cur INTO cur_emp_id, cur_emp_name;

        IF done THEN
            LEAVE emp_loop;
        END IF;
```

```
        INSERT INTO old_emps(emp_id, emp_name)
        VALUES(cur_emp_id, cur_emp_name);
    END LOOP;

    CLOSE cur;
END //

DELIMITER ;
```

Output:

Tables:

```
mysql> use a06_database;
Database changed
mysql> show tables;
+------------------------+
| Tables_in_a06_database |
+------------------------+
| new_emps               |
| old_emps               |
+------------------------+
2 rows in set (0.00 sec)
```

Schema of the tables:

```
mysql> desc old_emps;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| emp_id   | int          | NO   | PRI | NULL    |       |
| emp_name | varchar(200) | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

```
mysql> desc new_emps;
+----------+--------------+------+-----+---------+-------+
| Field    | Type         | Null | Key | Default | Extra |
+----------+--------------+------+-----+---------+-------+
| emp_id   | int          | NO   | PRI | NULL    |       |
| emp_name | varchar(200) | YES  |     | NULL    |       |
+----------+--------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

Initial data in old_emps tables:

```
mysql> select * from old_emps;
+--------+----------+
| emp_id | emp_name |
+--------+----------+
|      1 | Natasha  |
|      2 | Tony     |
|      3 | Steve    |
+--------+----------+
3 rows in set (0.00 sec)
```

Initial data in new_emps table:

```
mysql> select * from new_emps;
+--------+----------+
| emp_id | emp_name |
+--------+----------+
|      3 | Steve    |
|      4 | Peter    |
|      5 | Vision   |
+--------+----------+
3 rows in set (0.00 sec)
```

Using Cursor to Update the old_emps table:

```
mysql> call update_old();
Query OK, 0 rows affected (0.01 sec)

mysql> select * from old_emps;
+--------+----------+
| emp_id | emp_name |
+--------+----------+
|      1 | Natasha  |
|      2 | Tony     |
|      3 | Steve    |
|      4 | Peter    |
|      5 | Vision   |
+--------+----------+
5 rows in set (0.00 sec)
```

Explanation: There were three employees in old_emps table and three in new_emps table. We are updating old_emps table with new_emps table. As employee with id 3 is already present in old_emps table it should not added again while employees with id 4 and 5 are new entries for old_emps table so that should be added. So as a result our old_emps table should contain 5 emps which is shown in above screenshot.

Thank You!