



Semester I 2021/2022

Subject : Database (SECD2523)
Section : 09 – Dr Haslina Hashim
Task : LAB DML-1 – INSERT UPDATE DELETE

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Instruction:

Students are required to discuss the questions below.

Given CREATE TABLE statements as follows:

```
CREATE TABLE department (  
    depid          NUMBER(1) ,  
    dname          VARCHAR2(15) ,  
    dlocation      VARCHAR2(15) ,  
    CONSTRAINT pk_department PRIMARY KEY (depid)  
);
```

```
CREATE TABLE employee (  
    fname          VARCHAR2(15) ,  
    mname          VARCHAR2(2) ,  
    lname          VARCHAR2(15) ,  
    empid          VARCHAR2(4) NOT NULL ,  
    bdate          DATE ,  
    address         VARCHAR2(50) ,  
    sex            VARCHAR2(1) ,  
    salary          NUMBER(7) NOT NULL ,  
    svpid          VARCHAR2(4) ,  
    depid          NUMBER(1) NOT NULL ,  
    CONSTRAINT pk_employee PRIMARY KEY (empid)  
);
```

a) Insert new data into the **EMPLOYEE** table.

```
'FAHMI', 'M.', 'AHMAD', '1234', '28-JAN-90', '54 Jalan  
Palas, Taman Teratai, 81110 Skudai, Johor', 'M', 2200, NULL,  
5
```

(1 mark)

```
1 ✓ INSERT INTO EMPLOYEE  
2 VALUES ('FAHMI', 'M.', 'AHMAD', '1234', '28-JAN-90', '54 Jalan Palas, Taman Teratai, 81110 Skudai, Johor', 'M', 2200, NULL, 5);
```

1 row(s) inserted.

- b) Retrieve a list of all employees with salary between 1500 and 3000 from the **EMPLOYEE** table, by showing their first name, last name and salary.

(1.5 mark)

```
1 v SELECT fname,lname,salary
2   FROM EMPLOYEE
3   WHERE salary
4   BETWEEN 1500 AND 3000;
```

FNAME	LNAME	SALARY
FAHMI	AHMAD	2200
FAHMI	AHMAD	2200

- c) Give each employee in department 5 a 4 percent raise.

(1.5 mark)

```
1 v UPDATE EMPLOYEE
2   SET salary=salary*1.04
3   WHERE depid=5;
```

2 row(s) updated.

- d) Remove all data from the **EMPLOYEE** table.

(1 mark)

```
1 DELETE FROM EMPLOYEE
```

2 row(s) deleted.

5. Add a new column **EMAIL** with 15 characters wide to the existing **EMPLOYEE** table. Then, modify the length of the **FNAME** column to 25 characters and remove the column **SVPID** from the **EMPLOYEE** table.

(3 marks)

```
1 v ALTER TABLE EMPLOYEE
2   ADD EMAIL VARCHAR(15)
3
```

Table altered.

```
1 v ALTER TABLE EMPLOYEE
2   MODIFY fname VARCHAR(25);
```

Table altered.

```
1 v ALTER TABLE EMPLOYEE
2   DROP COLUMN svpid;
```

Table altered.

6. Add a foreign key that will relate the **EMPLOYEE** table to the **DEPARTMENT** table.

(2 marks)

```
1 ALTER TABLE EMPLOYEE
2 ADD CONSTRAINT fk_employee
3 FOREIGN KEY (depid) REFERENCES DEPARTMENT(depid);
```

Table altered.