**MySQL Assignment -2 (DML)**

1. **Write a SQL statement to insert a record as follows:**

**Employees :**

**+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+**

**| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |**

**+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+**

**| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 200 | 10 |**

**| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |**

**| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |**

**| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 103 | 60 |**

**| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |**

**| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |**

**| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |**

**| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 114 | 30 |**

**| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | SA\_MAN | 12000.00 | 0.00 | 145 | 80 |**

**| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | SA\_MAN | 9000.00 | 0.00 | 145 | 80 |**

**Ans:**

mysql> insert into Employees values(100,'Steven','King','SKING','515.123.4567','1987-06-17','AD\_PRES',24000.00,0.00,200,10);

Query OK, 1 row affected (0.01 sec)

mysql> insert into Employees values(101,'Neena','Kochhar','NKOCHHAR','515.123.4568','1987-06-18','AD\_VP',17000.00,0.00,200,10);

Query OK, 1 row affected (0.09 sec)

mysql> insert into Employees values(102,'Lex','De Haan','LDFHAAN','515.123.4569','1987-06-19','AD\_VP',17000.00,0.00,200,10);

Query OK, 1 row affected (0.04 sec)

mysql> insert into employees values(103,'Alexander','Hunold','AHUNOLD','590.423.4567','1987-06-20','IT\_PROG',9000,0.00,103,60);

Query OK, 1 row affected (0.05 sec)

mysql> insert into employees values(104,'Bruce','Ernst','BERNST','590.423.4568','1987-06-21','IT\_PROG',6000,0.00,103,60);

Query OK, 1 row affected (0.03 sec)

mysql> insert into employees values(105,'David','Austin','DAUSTIN','590.423.4569','1987-06-22','IT\_PROG',4800,0.00,103,60);

Query OK, 1 row affected (0.04 sec)

mysql> insert into employees values(106,'Valli','Pataballa','VPATABAL','590.623.4560','1987-06-23','IT\_PROG',4800,0.00,103,60);

Query OK, 1 row affected (0.05 sec)

mysql> insert into employees values(107,'Diana','Lorentz','DLORENTZ','590.423.5567','1987-06-24','IT\_PROG',4200.00,0.00,114,30);

Query OK, 1 row affected (0.05 sec)

mysql> insert into employees values(108,'Nancy','GreeenBerg','NGREENBE','515.124.4569','1987-06-25','SA\_MAN',12000.00,0.00,145,80);

Query OK, 1 row affected (0.09 sec)

mysql> insert into employees values(109,'Daniel','Faviet','DFAVIET','515.124.4169','1987-06-26','SA\_MAN',9000.00,0.00,145,80);

Query OK, 1 row affected (0.03 sec)

mysql> select \* from employees;

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 200 | 10 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 103 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 114 | 30 |

| 108 | Nancy | GreeenBerg | NGREENBE | 515.124.4569 | 1987-06-25 | SA\_MAN | 12000.00 | 0.00 | 145 | 80 |

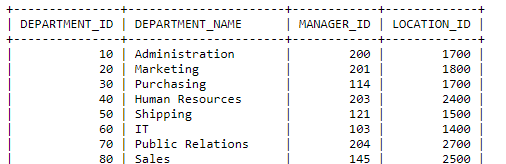
| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | SA\_MAN | 9000.00 | 0.00 | 145 | 80 |

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

10 rows in set (0.00 sec)

mysql>

**Department :**

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**Ans:**

mysql> insert into Department Values(10,'Administration',200,1700);

Query OK, 1 row affected (0.06 sec)

mysql> insert into Department Values (20,'Marketing',201,1800);

Query OK, 1 row affected (0.05 sec)

mysql> insert into Department Values(30,'Purchasing',114,1700);

Query OK, 1 row affected (0.04 sec)

mysql> insert into Department Values (40,'Human Resources',203,2400);

Query OK, 1 row affected (0.06 sec)

mysql> insert into Department Values(50,'Shipping',121,1500);

Query OK, 1 row affected (0.07 sec)

mysql> insert into Department Values (60,'IT',103,1400);

Query OK, 1 row affected (0.08 sec)

mysql> insert into Department Values(70,'Public Relations',204,2700);

Query OK, 1 row affected (0.08 sec)

mysql> insert into Department Values(80,'Sales',145,2500);

Query OK, 1 row affected (0.11 sec)

mysql> select \* from Department;

+---------------+------------------+------------+-------------+

| DEPARTMENT\_ID | DEPARTMENT\_NAME | MANAGER\_ID | LOCATION\_ID |

+---------------+------------------+------------+-------------+

| 10 | Administration | 200 | 1700 |

| 20 | Marketing | 201 | 1800 |

| 30 | Purchasing | 114 | 1700 |

| 40 | Human Resources | 203 | 2400 |

| 50 | Shipping | 121 | 1500 |

| 60 | IT | 103 | 1400 |

| 70 | Public Relations | 204 | 2700 |

| 80 | Sales | 145 | 2500 |

+---------------+------------------+------------+-------------+

8 rows in set (0.00 sec)

1. **Write a SQL statement to insert 3 rows by a single insert statement.**

**Ans:**

mysql> create table countries(Country\_ID varchar(10),COUNTRY\_NAME varchar(10),REGION\_ID decimal(4,0));

Query OK, 0 rows affected (0.17 sec)

mysql> desc countries;

+--------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------------+--------------+------+-----+---------+-------+

| Country\_ID | varchar(10) | YES | | NULL | |

| COUNTRY\_NAME | varchar(10) | YES | | NULL | |

| REGION\_ID | decimal(4,0) | YES | | NULL | |

+--------------+--------------+------+-----+---------+-------+

3 rows in set (0.10 sec)

mysql> insert into countries values('C001','India',1001),('C002','USA',1007),('C003','UK',1003);

Query OK, 3 rows affected (0.06 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from countries;

+------------+--------------+-----------+

| Country\_ID | COUNTRY\_NAME | REGION\_ID |

+------------+--------------+-----------+

| C001 | India | 1001 |

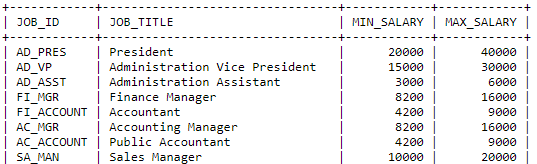
| C002 | USA | 1007 |

| C003 | UK | 1003 |

+------------+--------------+-----------+

3 rows in set (0.00 sec)

1. **Write a SQL statement to insert one row in jobs table to ensure that no duplicate value will be entered in the job\_id column.**

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**Ans:**

mysql> alter table jobs

-> modify JOB\_ID varchar(30) unique;

Query OK, 0 rows affected (0.43 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from jobs;

+---------------+-------------------------------+------------+------------+

| JOB\_ID | JOB\_TITLE | MIN\_SALARY | MAX\_SALARY |

+---------------+-------------------------------+------------+------------+

| AD\_PRES | President | 20000 | 40000 |

| AD\_VP | Administration vice president | 15000 | 30000 |

| AD\_ASST | Administration Assistant | 3000 | 6000 |

| FI\_MGR | Finance Manager | 8200 | 16000 |

| FI\_ACCOUNTANT | Accountant | 4200 | 9000 |

| AC\_MGR | Accounting Manager | 8200 | 16000 |

| AC\_ACCOUNTANT | public Accountant | 4200 | 9000 |

| SA\_MAN | Sales Manager | 10000 | 20000 |

+---------------+-------------------------------+------------+------------+

8 rows in set (0.00 sec)

mysql> insert into jobs values('AD\_PRES','abc',15000,25000);

ERROR 1062 (23000): Duplicate entry 'AD\_PRES' for key 'jobs.JOB\_ID'

1. **Write SQL statement to increment salary of each emp by 10%.**

**Ans:**

mysql> update employees set salary=salary+(salary\*10/100);

Query OK, 10 rows affected (0.08 sec)

Rows matched: 10 Changed: 10 Warnings: 0

mysql> select \* from employees;

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 26400.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9900.00 | 0.00 | 103 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6600.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4620.00 | 0.00 | 114 | 30 |

| 108 | Nancy | GreeenBerg | NGREENBE | 515.124.4569 | 1987-06-25 | SA\_MAN | 13200.00 | 0.00 | 145 | 80 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | SA\_MAN | 9900.00 | 0.00 | 145 | 80 |

+-------------+------------+------------+----------+--------------+------------+---------+----------+---------------+------------+---------------+

10 rows in set (0.00 sec)

1. **Write a SQL statement to change the email column of employees table with 'not available' for those employees whose department\_id is 80 and gets a commission is less than .20%**

**Ans:**

mysql> update employees

-> set email='not available'

-> where department\_id=80 and commision\_pct<20;

Query OK, 2 rows affected (0.09 sec)

Rows matched: 2 Changed: 2 Warnings: 0

mysql> select \* from employees;

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 26400.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9900.00 | 0.00 | 103 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6600.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4620.00 | 0.00 | 114 | 30 |

| 108 | Nancy | GreeenBerg | not available | 515.124.4569 | 1987-06-25 | SA\_MAN | 13200.00 | 0.00 | 145 | 80 |

| 109 | Daniel | Faviet | not available | 515.124.4169 | 1987-06-26 | SA\_MAN | 9900.00 | 0.00 | 145 | 80 |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

10 rows in set (0.00 sec)

1. **Write a SQL statement to change the email column of employees table with 'not available' for those employees who belongs to the 'Purchasing' department.**

**Ans:**

mysql> update employees

-> set email='not available',

-> commision\_pct=0.10

-> where department\_id=110;

Query OK, 0 rows affected (0.00 sec)

Rows matched: 0 Changed: 0 Warnings: 0

mysql> select \* from employees;

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 26400.00 | 0.00 | 200 | 10 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 102 | Lex | De Haan | LDFHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 18700.00 | 0.00 | 200 | 10 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9900.00 | 0.00 | 103 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6600.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.623.4560 | 1987-06-23 | IT\_PROG | 5280.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4620.00 | 0.00 | 114 | 30 |

| 108 | Nancy | GreeenBerg | not available | 515.124.4569 | 1987-06-25 | SA\_MAN | 13200.00 | 0.00 | 145 | 80 |

| 109 | Daniel | Faviet | not available | 515.124.4169 | 1987-06-26 | SA\_MAN | 9900.00 | 0.00 | 145 | 80 |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

10 rows in set (0.00 sec)

1. **Write a SQL statement to change the email and commission\_pct column of employees table with 'not available' and 0.10 for all employees.**

**Ans:**

mysql> update employees set email='not available',

-> commision\_pct=0.10;

Query OK, 10 rows affected (0.07 sec)

Rows matched: 10 Changed: 10 Warnings: 0

mysql> select \* from employees;

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | not available | 515.123.4567 | 1987-06-17 | AD\_PRES | 26400.00 | 0.10 | 200 | 10 |

| 101 | Neena | Kochhar | not available | 515.123.4568 | 1987-06-18 | AD\_VP | 18700.00 | 0.10 | 200 | 10 |

| 102 | Lex | De Haan | not available | 515.123.4569 | 1987-06-19 | AD\_VP | 18700.00 | 0.10 | 200 | 10 |

| 103 | Alexander | Hunold | not available | 590.423.4567 | 1987-06-20 | IT\_PROG | 9900.00 | 0.10 | 103 | 60 |

| 104 | Bruce | Ernst | not available | 590.423.4568 | 1987-06-21 | IT\_PROG | 6600.00 | 0.10 | 103 | 60 |

| 105 | David | Austin | not available | 590.423.4569 | 1987-06-22 | IT\_PROG | 5280.00 | 0.10 | 103 | 60 |

| 106 | Valli | Pataballa | not available | 590.623.4560 | 1987-06-23 | IT\_PROG | 5280.00 | 0.10 | 103 | 60 |

| 107 | Diana | Lorentz | not available | 590.423.5567 | 1987-06-24 | IT\_PROG | 4620.00 | 0.10 | 114 | 30 |

| 108 | Nancy | GreeenBerg | not available | 515.124.4569 | 1987-06-25 | SA\_MAN | 13200.00 | 0.10 | 145 | 80 |

| 109 | Daniel | Faviet | not available | 515.124.4169 | 1987-06-26 | SA\_MAN | 9900.00 | 0.10 | 145 | 80 |

+-------------+------------+------------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

10 rows in set (0.00 sec)

mysql> select \* from employees limit 2;

+-------------+------------+-----------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+------------+-----------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

| 100 | Steven | King | not available | 515.123.4567 | 1987-06-17 | AD\_PRES | 26400.00 | 0.10 | 200 | 10 |

| 101 | Neena | Kochhar | not available | 515.123.4568 | 1987-06-18 | AD\_VP | 18700.00 | 0.10 | 200 | 10 |

+-------------+------------+-----------+---------------+--------------+------------+---------+----------+---------------+------------+---------------+

2 rows in set (0.00 sec)

mysql>