**MYSQl Assignment**

**Week#6**

**Problem#1** mysql> create table employee (

-> EMP\_ID CHAR(4),

-> NAME VARCHAR(20),

-> DOB DATE,

-> TITLE VARCHAR(20),

-> SALARY Float(10,2),

-> BONUS Float(4));

Query OK, 0 rows affected (0.01 sec)

**Problem#2** mysql> describe employee;

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

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

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

| EMP\_ID | char(4) | YES | | NULL | |

| NAME | varchar(20) | YES | | NULL | |

| DOB | date | YES | | NULL | |

| TITLE | varchar(20) | YES | | NULL | |

| SALARY | float(10,2) | YES | | NULL | |

| BONUS | float | YES | | NULL | |

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

6 rows in set (0.00 sec)

**Problem#3**

mysql> Insert into employee values('01' ,'Smith/James', '1989-01-29','Salesperson', 80000.20, 2220);

Query OK, 1 row affected (0.00 sec)

mysql> Insert into employee values('02','Johnson/Ron K','1999-02-25', 'Sales Manager', 95000.56, 3500);

Query OK, 1 row affected (0.00 sec)

mysql> Insert into employee values('03','Hobbs/Fred Ann', '1991-04-12', 'Salesperson', 85000, 2700);

Query OK, 1 row affected (0.00 sec)

mysql> Insert into employee values('04','Mary/Jones', '1999-07-15', 'CEO', 189000.78, 9670);

Query OK, 1 row affected (0.00 sec)

mysql> Insert into employee values('05','Doe/Susan', '1998-08-20', 'Salesperson', 82000.56 , 2140);

Query OK, 1 row affected (0.00 sec)

mysql> Insert into employee values('06','Langley/M Richard', '1994-12-21', 'Sales Manager', 98000.56 , 4140);

Query OK, 1 row affected (0.00 sec)

mysql> select \* from employee;

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

| EMP\_ID | NAME | DOB | TITLE | SALARY | BONUS |

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

| 01 | Smith/James | 1989-01-29 | Salesperson | 80000.20 | 2220 |

| 02 | Johnson/Ron K | 1999-02-25 | Sales Manager | 95000.56 | 3500 |

| 03 | Hobbs/Fred Ann | 1991-04-12 | Salesperson | 85000.00 | 2700 |

| 04 | Mary/Jones | 1999-07-15 | CEO | 189000.78 | 9670 |

| 05 | Doe/Susan | 1998-08-20 | Salesperson | 82000.56 | 2140 |

| 06 | Langley/M Richard | 1994-12-21 | Sales Manager | 98000.56 | 4140 |

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

6 rows in set (0.00 sec)

**Problem#4**

**(BEFORE)**

mysql> select \* from employee where title = "Salesperson";

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

| EMP\_ID | NAME | DOB | TITLE | SALARY | BONUS |

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

| 01 | Smith/James | 1989-01-29 | Salesperson | 80000.20 | 2220 |

| 03 | Hobbs/Fred Ann | 1991-04-12 | Salesperson | 85000.00 | 2700 |

| 05 | Doe/Susan | 1998-08-20 | Salesperson | 82000.56 | 2140 |

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

3 rows in set (0.00 sec)

mysql> **update employee**

-> set bonus = bonus + 200

-> where title = "Salesperson";

**(AFTER UPDATING)**

mysql> select \* from employee where title = "Salesperson";

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

| EMP\_ID | NAME | DOB | TITLE | SALARY | BONUS |

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

| 01 | Smith/James | 1989-01-29 | Salesperson | 80000.20 | 2420 |

| 03 | Hobbs/Fred Ann | 1991-04-12 | Salesperson | 85000.00 | 2900 |

| 05 | Doe/Susan | 1998-08-20 | Salesperson | 82000.56 | 2340 |

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

3 rows in set (0.00 sec)

**Problem#5**

mysql> select name ,title, salary from employee

-> order by title,salary;

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

| name | title**(Primary)|** salary**(Secondary)**|

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

| Mary/Jones | CEO | 189000.78 |

| Johnson/Ron K | Sales Manager | 95000.56 |

| Langley/M Richard | Sales Manager | 98000.56 |

| Smith/James | Salesperson | 80000.20 |

| Doe/Susan | Salesperson | 82000.56 |

| Hobbs/Fred Ann | Salesperson | 85000.00 |

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

6 rows in set (0.00 sec)

**Problem#6**

mysql> select name, concat( substr(name,instr(name,'/')+1),' ',

-> substr(name,1,instr(name,'/')-1))NAME from employee;

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

| name | NAME |

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

| Smith/James | James Smith |

| Johnson/Ron K | Ron K Johnson |

| Hobbs/Fred Ann | Fred Ann Hobbs |

| Mary/Jones | Jones Mary |

| Doe/Susan | Susan Doe |

| Langley/M Richard | M Richard Langley |

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

6 rows in set (0.00 sec)

**Problem#7**

mysql> select concat(substr(bonus,3,2),mod(bonus,3),

-> substr(name,1,instr(name,'/')-1),length(title))CODE from employee;

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

| CODE |

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

| 202Smith11 |

| 002Johnson13 |

| 002Hobbs11 |

| 701Mary3 |

| 400Doe11 |

| 400Langley13 |

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

6 rows in set (0.00 sec)

**Problem#8**

**Adding new\_sal as new field**

mysql> alter table employee

-> add (new\_sal float(10,2));

Query OK, 6 rows affected (0.03 sec)

mysql> describe employee;

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

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

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

| EMP\_ID | char(4) | YES | | NULL | |

| NAME | varchar(20) | YES | | NULL | |

| DOB | date | YES | | NULL | |

| TITLE | varchar(20) | YES | | NULL | |

| SALARY | float(10,2) | YES | | NULL | |

| BONUS | float | YES | | NULL | |

**| new\_sal | float(10,2) | YES | | NULL |** |

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

7 rows in set (0.00 sec

mysql> update employee

-> set new\_sal = salary +(salary \*2/100);

mysql> select salary,new\_sal from employee;

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

| salary | **new\_sal** |

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

| 80000.20 | 81600.21 |

| 95000.56 | 96900.57 |

| 85000.00 | 86700.00 |

| 189000.78 | 192780.80 |

| 82000.56 | 83640.57 |

| 98000.56 | 99960.57 |

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

6 rows in set (0.00 sec)

**Problem#9**

mysql> select title, count(bonus),sum(bonus)

-> from employee group by title;

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

| title | count(bonus) | sum(bonus) |

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

| CEO | 1 | 9670 |

| Sales Manager | 2 | 7640 |

| Salesperson | 3 | 7660 |

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

3 rows in set (0.00 sec)

**Problem#10**

mysql> select title, count(bonus),sum(bonus)

-> from employee where bonus > 2600 group by title;

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

| title | count(bonus) | sum(bonus) |

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

| CEO | 1 | 9670 |

| Sales Manager | 2 | 7640 |

| Salesperson | 1 | 2900 |

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

3 rows in set (0.00 sec)

**Problem#11**

mysql> select title, count(bonus),sum(bonus)

-> from employee group by title having sum(bonus)>7650;

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

| title | count(bonus) | sum(bonus) |

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

| CEO | 1 | 9670 |

| Salesperson | 3 | 7660 |

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

2 rows in set (0.00 sec)

**Problem#12**

mysql> select title, avg(bonus),sum(bonus)

-> from employee group by title

-> having sum(bonus)<9000 order by sum(bonus) ;

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

| title | avg(bonus) | sum(bonus) |

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

| Sales Manager | 3820 | 7640 |

| Salesperson | 2553.3333333333335 | 7660 |

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

2 rows in set (0.00 sec)