Group A: Lab Assignment No.3

TITLE: Design at least 10 SQL queries for suitable database application using SQL DML statements: Insert, Select, Update, Delete with operators, functions, and set operator.

```
mysql> show databases;
+ -----+
| Database
+ ----+
| information schema |
|A|
| Abhi |
| PVG |
| RENUKA |
| mysql |
| nishant |
performance schema
| renuka |
sys
time |
+ ----+
11 rows in set (0.11 \text{ sec})
mysql> use Abhi;
Database changed
mysql> create table Employee(emp no int,emp name varchar(20),date date,position
varchar(20));
Query OK, 0 rows affected (0.75 sec)
mysql> alter table Employee add salary int;
Query OK, 0 rows affected (0.68
sec) Records: 0
Duplicates: 0
Warnings: 0
mysql> insert into Employee values('01','abc','2018-07-11','clerk','50000');
Query OK, 1 row affected (0.08 sec)
```

```
mysql> insert into Employee values('02','abhi','2018-05-11','ceo','150000');
Query OK, 1 row affected (0.08 sec)
mysql> insert into Employee values('03','xyz','2018-05-21','hr','100000');
Query OK, 1 row affected (0.04 sec)
mysql> insert into Employee values('04','aqwgy','2018-06-21','te','10000');
Query OK, 1 row affected (0.03 sec)
mysql> insert into Employee values('05','sfhjfh','2018-07-21','gt','12000');
Query OK, 1 row affected (0.03 sec)
mysql> create table TE(emp no int,emp namevarchar(20),join date date,position
varchar(20),salary int);
Query OK, 0 rows affected (0.36 sec)
mysql> insert into TE values('01','abc','2018-07-11','clerk','50000');
Query OK, 1 row affected (0.03 sec)
mysql> insert into TE values('02','abhi','2018-05-11','ceo','150000');
Query OK, 1 row affected (0.04 sec)
mysql> insert into TE values('03','xyz','2018-05-21','hr','100000');
Query OK, 1 row affected (0.04 sec)
mysql> insert into TE values('04','aqwgy','2018-06-21','te','10000');
Query OK, 1 row affected (0.05 sec)
mysql> insert into TE values('05','sfhjfh','2018-07-21','gt','12000');
Query OK, 1 row affected (0.04 sec)
mysql> select * from TE;
+----+ ++
emp no emp name join date
| position | salary |
+----+ ++
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 | te |
```

```
10000 |
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
+-----+-+-+
5 rows in set (0.04 \text{ sec})
mysql> select * from Employee;
+-----+-+-+
emp no emp name date
| position | salary |
+-----+-+-+
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
5 rows in set (0.00 \text{ sec})
mysql> update TE set emp_name='gjgj' where emp_no='5';
Query OK, 1 row affected (0.13
sec) Rows matched: 1
Changed: 1
Warnings: 0
mysql> select * from TE;
+-----+--+-+
emp_no emp_name join_date
| position | salary |
+----++
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | gigi | 2018-07-21 | gt |
12000 |
+----++
5 rows in set (0.00 \text{ sec})
mysql> select * from Employee union select * from TE;
+-----+--+-+-+
emp no emp name date
| position | salary |
+----+ ++
| 1 | abc | 2018-07-11 | clerk |
```

```
50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
| 5 | gjgj | 2018-07-21 | gt |
12000
+-----+ -+
6 \text{ rows in set } (0.01 \text{ sec})
mysql> select * from Employee union all select * from TE;
+-----+ emp no | emp name | date
| position | salary |
+----++-+
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | gigi | 2018-07-21 | gt |
12000
+----+ ++
10 rows in set (0.00 sec)
mysql> select distinct emp no from Employee where emp no in(select emp no from TE);
++
emp no
+ +
| 1 |
|2|
|3|
|4|
| 5 |
5 rows in set (0.03 \text{ sec})
mysql> select * from Employee;
+----+ ++
emp no emp name date
| position | salary |
```

```
+-----+ --+ | 1 | abc | 2018-07-11 | clerk |
50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
+-----+-+-+
5 rows in set (0.00 \text{ sec})
mysql> select * from TE;
+----++
emp no emp_name join_date
| position | salary |
+----++
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | gjgj | 2018-07-21 | gt |
12000 |
+----+-+-+
5 rows in set (0.00 \text{ sec})
mysql> select distinct emp name from Employee where emp name in(select emp name
from TE);
+ --+
emp name
+ --+
abc |
abhi |
XYZ
| aqwgy |
4 rows in set (0.00 \text{ sec})
mysql> select * from Employee;
+-----+-+-+
emp no emp name date
| position | salary |
+----++
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
```

```
| 5 | sfhjfh | 2018-07-21 |
gt | 12000 |
+----++
5 rows in set (0.00 \text{ sec})
mysql> select * from TE;
+----++
emp_no emp_name join_date
| position | salary |
+----+ ++
| 1 | abc | 2018-07-11 |
clerk | 50000 |
| 2 | abhi | 2018-05-11 | ceo | 150000 |
| 3 | xyz | 2018-05-21 | hr | 100000 |
| 4 | aqwgy | 2018-06-21 |
te | 10000 |
| 5 | gigi | 2018-07-21 | gt |
12000
+----++
5 rows in set (0.00 \text{ sec})
mysql> select distinct emp name from Employee where emp name in(select emp name
from TE);
+ --+
emp name
+ --+
abc |
abhi |
| xyz || aqwgy
4 rows in set (0.00 \text{ sec})
mysql> select min(salary) from Employee;
+ ----+
| min(salary) |
+ ----+
10000 |
+ ----+
1 row in set (0.04 sec)
mysql> select max(salary) from Employee;
+ ----+
| max(salary) |
+ ----+
150000 |
+ ----+
```

```
1 row in set (0.00 sec)
mysql> select sum(salary) from Employee;
+ ----+
| sum(salary) |
+ ----+
322000 |
+ ----+
1 row in set (0.00 sec)
mysql> select avg(salary) from Employee;
+ ----+
| avg(salary) |
+ ----+
64400.0000 |
+ ----+
1 row in set (0.00 sec)
mysql> select count(salary) from Employee;
+ ----+
| count(salary) |
+ ----+
5 |
+ ----+
1 row in set (0.00 sec)
mysql> select lcase(emp_no) from Employee;
+ ----+
| lcase(emp no) |
+ ----+
| 1 |
|2|
|3|
|4|
| 5 |
+ ----+
5 rows in set (0.00 \text{ sec})
mysql> select ucase(emp no) from Employee;
+ ----+
| ucase(emp no) |
+ ----+
| 1 |
|2|
|3|
|4||5
```

```
+ ----+
5 rows in set (0.00 \text{ sec})
mysql> select lcase(salary) from Employee;
+ ----+
| lcase(salary) |
+ ----+
| 50000 |
| 150000 |
| 100000 |
| 10000 |
| 12000 |
+ ----+
5 rows in set (0.00 \text{ sec})
mysql> select mid(emp no,1,3) from Employee;
+ -----+
| mid(emp no,1,3) |
+ ----+
|1|
|2|
|3|
|4|
| 5 |
+ -----+
5 rows in set (0.01 sec)
mysql> select mid(emp_no,1,3) from Employee;
+ ----+
| mid(emp_no,1,3) |
+ -----+| 1 |
|2|
| 3 |
|4|
| 5 |
+ ----+
5 rows in set (0.00 \text{ sec})
mysql> select mid(emp_no,1,5) from Employee;
+ ----+
| mid(emp no,1,5) |
+ -----+
|1|
|2|
| 3 |
|4|
| 5 |
5 rows in set (0.00 \text{ sec})
```

```
mysql> select mid(salary,1,3) from Employee;
+ ----+
| mid(salary,1,3) |
+ -----+
| 500 |
| 150 |
| 100 |
| 100 |
| 120 |
+ ----+
5 rows in set (0.00 sec)
mysql> select mid(salary,1,5) from Employee;
+ -----+
| mid(salary,1,5) |
+ -----+
| 50000 |
| 15000 |
| 10000 |
| 10000 |
| 12000 |
+ ----+
5 rows in set (0.00 sec)
mysql> select mid(emp_no,1,2) from Employee;
| mid(emp_no,1,2) |
+ ----+
|1|
|2|
|3|
|4|
| 5 |
+ ----+
5 rows in set (0.00 sec)
```