

ASSIGNMENT NO 2

SQL Queries: a. Design and Develop SQL DDL statements which demonstrate the use of SQL objects such as Table, View, Index, Sequence, Synonym, different constraints etc. b. Write at least 10 SQL queries on the suitable database application using SQL DML statements. c. Note: Instructor will design the queries which demonstrate the use of concepts like Insert, Select, Update, Delete with operators, functions, and set operator etc.

Create following table

Table Name : Customer

Table Column Name : Account_no, Name, Balance, City

Insert Following Record

1 Ram 10000 Pune

2 Ravi 25000 Nasik

3 Sachin 30000 Mumbai

Set Operation : Union, Intersect, Minus

Create following table

Table Name : Loan

Table Column Name : Loan_no, Name, Loan_Amount

Insert Following Record

1 Ram 10000

2 Ravi 50000

4 Dipak 40000

1) Select customer having account in the bank or taken the loan from the bank

2) Select customer having account as well as loan in the bank

3) Select customer having account in the bank but not taken the loan

```
gescoe@gescoe-OptiPlex-3010:~$ mysql -h 192.168.2.232 -u TEB41 -p
```

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 62

Server version: 5.6.41 MySQL Community Server (GPL)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> create database AS_1;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> use AS_1;
Database changed
mysql> create table customer(accno int primary key,name varchar(15),balance numeric(10),city
varchar(15));
Query OK, 0 rows affected (0.33 sec)
```

```
mysql> desc customer;
+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| accno | int(11)       | NO   | PRI | NULL    |       |
| name  | varchar(15)   | YES  |     | NULL    |       |
| balance | decimal(10,0) | YES  |     | NULL    |       |
| city  | varchar(15)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> insert into customer
values(1,'Ram',10000,'Pune'),(2,'Ravi',25000,'Nashik'),(3,'Sachin',30000,'Mumbai');Query OK, 3
rows affected (0.06 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> select * from customer;
+-----+-----+-----+-----+
| accno | name  | balance | city  |
+-----+-----+-----+-----+
| 1     | Ram   | 10000   | Pune  |
| 2     | Ravi  | 25000   | Nashik |
```

```
|      3 | Sachin | 30000 | Mumbai |
+-----+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> create table loan(loanno int primary key,name varchar(15),loanamt numeric(10));
Query OK, 0 rows affected (0.29 sec)
```

```
mysql> desc loan;
```

```
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| loanno | int(11)       | NO   | PRI | NULL    |       |
| name   | varchar(15)   | YES  |     | NULL    |       |
| loanamt | decimal(10,0) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
```

3 rows in set (0.01 sec)

```
mysql> insert into loan values(1,'Ram',10000),(2,'Ravi',50000),(4,'dipak',40000);
Query OK, 3 rows affected (0.05 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select * from loan;
```

```
+-----+-----+-----+
| loanno | name  | loanamt |
+-----+-----+-----+
|      1 | Ram   | 10000   |
|      2 | Ravi  | 50000   |
|      4 | dipak | 40000   |
+-----+-----+-----+
```

3 rows in set (0.00 sec)

```
mysql> (select name from customer) union (select name from loan);           --having
account and loan
```

```
+-----+
| name |
+-----+
| Ram  |
| Ravi |
| Sachin |
| dipak |
```

+-----+

4 rows in set (0.00 sec)

mysql> select name from customer where name in(select name from loan);

+-----+

| name |

+-----+

| Ram |

| Ravi |

+-----+

2 rows in set (0.00 sec)

mysql> select name from customer where name not in(select name from loan);

+-----+

| name |

+-----+

| Sachin |

+-----+

1 row in set (0.00 sec)

mysql> select name from loan where name not in(select name from customer);

+-----+

| name |

+-----+

| dipak |

+-----+

1 row in set (0.00 sec)

mysql> select * from customer where balance>20000;

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

| accno | name | balance | city |

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

| 2 | Ravi | 25000 | Nashik |

| 3 | Sachin | 30000 | Mumbai |

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

2 rows in set (0.00 sec)

mysql> select * from customer where balance>20000 and city='Nashik';

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

| accno | name | balance | city |

```
+-----+-----+-----+-----+
|      2 | Ravi | 25000 | Nashik |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> create index myindex on customer(name);
Query OK, 0 rows affected (0.27 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> show indexes from customer;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality |
Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| customer |      0 | PRIMARY |      1 | accno      | A        |      3 | NULL |
NULL |      | BTREE      |      |      |
| customer |      1 | myindex |      1 | name       | A        |      3 | NULL |
NULL | YES | BTREE      |      |      |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> create index dataindex on customer(accno,name);
Query OK, 0 rows affected (0.28 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> show indexes from customer;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality |
Sub_part | Packed | Null | Index_type | Comment | Index_comment |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| customer |      0 | PRIMARY |      1 | accno      | A        |      3 | NULL |
NULL |      | BTREE      |      |      |
| customer |      1 | myindex |      1 | name       | A        |      3 | NULL |
NULL | YES | BTREE      |      |      |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

customer	1	dataindex	1	accno	A	3	NULL
NULL		BTREE					
customer	1	dataindex	2	name	A	3	NULL
NULL	YES	BTREE					

4 rows in set (0.00 sec)

```
mysql> select * from customer order by balance asc;
```

accno	name	balance	city
1	Ram	10000	Pune
2	Ravi	25000	Nashik
3	Sachin	30000	Mumbai

3 rows in set (0.00 sec)

```
mysql> select * from loan order by loanamt desc;
```

loanno	name	loanamt
2	Ravi	50000
4	dipak	40000
1	Ram	10000

3 rows in set (0.00 sec)

```
mysql> select accno,name,balance,balance*0.04*20 as interest from customer;
```

accno	name	balance	interest
1	Ram	10000	8000.00
2	Ravi	25000	20000.00
3	Sachin	30000	24000.00

3 rows in set (0.00 sec)

```
mysql>
```

