**Assignment Group: A**

**Assignment NO 2**

**Assignment Title**: 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 teken 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 TEB19 -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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owners.

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 | | |

| 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>