**Assignment 2**

Name: Jain Samkitkumar Hasmukhlal

Class: TEIT Roll. No.: 20 Batch: T1

Date:18/6/2015

Design and Develop SQL/NoSQL DDL statements which demonstrate the use of SQL objects such as Table, View, Index, Sequence, Synonym.

***Create:-***

mysql> create database sam;

Query OK, 1 row affected (0.02 sec)

mysql> show databases;

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

| Database |

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

| information\_schema |

| mysql |

| performance\_schema |

| sakila |

| sam |

| test |

| world |

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

8 rows in set (0.39 sec)

mysql> use sam;

Database changed

mysql> create table customer

-> (customer\_name char(20),

-> customer\_street char(30),

-> customer\_city char(30),

-> primary key(customer\_name));

Query OK, 0 rows affected (1.44 sec)

mysql> insert into customer values('Samkit','VIT Hostel Rd','Pune');

Query OK, 1 row affected (0.16 sec)

mysql> select \* from customer;

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

| customer\_name | customer\_street | customer\_city |

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

| Samkit | VIT Hostel Rd | Pune |

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

1 row in set (0.00 sec)

mysql> create table account

-> (account\_number char(10) primary key,

-> branch\_name char(15),

-> balance int);

Query OK, 0 rows affected (0.58 sec)

mysql> insert into account

-> (branch\_name,balance,account\_number) values

-> ('Katraj',100000,'A-01');

Query OK, 1 row affected (0.08 sec)

mysql> select \* from account;

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

| account\_number | branch\_name | balance |

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

| A-01 | Katraj | 100000 |

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

1 row in set (0.00 sec)

mysql> create table depositor

-> (customer\_name char(20),

-> account\_number char(10),

-> primary key(customer\_name,account\_number));

Query OK, 0 rows affected (0.63 sec)

mysql> insert into depositor values('Samkit','A-01');

Query OK, 1 row affected (0.20 sec)

mysql> select \* from depositor;

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

| customer\_name | account\_number |

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

| Samkit | A-01 |

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

1 row in set (0.00 sec)

mysql> create view cust as select customer\_name, customer\_city

-> from customer;

Query OK, 0 rows affected (0.13 sec)

mysql> select \* from cust;

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

| customer\_name | customer\_city |

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

| Samkit | Pune |

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

1 row in set (0.08 sec)

mysql> insert into cust values('Aish','Satara');

Query OK, 1 row affected (0.06 sec)

mysql> select \* from cust;

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

| customer\_name | customer\_city |

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

| Aish | Satara |

| Samkit | Pune |

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

2 rows in set (0.02 sec)

mysql> select \* from customer;

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

| customer\_name | customer\_street | customer\_city |

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

| Aish | NULL | Satara |

| Samkit | VIT Hostel Rd | Pune |

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

2 rows in set (0.00 sec)

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| cust |

| customer |

| depositor |

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

4 rows in set (0.03 sec)

mysql> create index ind\_cust on customer(customer\_name desc);

Query OK, 0 rows affected (0.36 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> create index ind1\_cust on customer(customer\_name,customer\_city asc);

Query OK, 0 rows affected (0.30 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> create unique index ind2\_cust on customer(customer\_name asc);

Query OK, 0 rows affected (0.34 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> show index 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 | customer\_name | A |

2 | NULL | NULL | | BTREE | | |

| customer | 0 | ind2\_cust | 1 | customer\_name | A |

2 | NULL | NULL | | BTREE | | |

| customer | 1 | ind\_cust | 1 | customer\_name | A |

2 | NULL | NULL | | BTREE | | |

| customer | 1 | ind1\_cust | 1 | customer\_name | A |

2 | NULL | NULL | | BTREE | | |

| customer | 1 | ind1\_cust | 2 | customer\_city | A |

2 | NULL | NULL | YES | BTREE | | |

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

5 rows in set (0.00 sec)

***Alter:-***

mysql> desc cust;

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

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

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

| customer\_name | char(20) | NO | | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

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

3 rows in set (0.09 sec)

mysql> alter table cust add primary key(customer\_name);

Query OK, 0 rows affected (0.69 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc cust;

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

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

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

| customer\_name | char(20) | NO | PRI | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

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

3 rows in set (0.06 sec)

mysql> alter table customer add pin\_code int;

Query OK, 0 rows affected (0.95 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from customer;

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

| customer\_name | customer\_street | customer\_city | pin\_code |

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

| Samkit | VIT Hostel Rd | Pune | NULL |

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

1 row in set (0.00 sec)

mysql> alter table customer change pin\_code pin int;

Query OK, 0 rows affected (0.14 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from customer;

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

| customer\_name | customer\_street | customer\_city | pin |

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

| Samkit | VIT Hostel Rd | Pune | NULL |

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

1 row in set (0.00 sec)

mysql> desc customer;

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

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

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

| customer\_name | char(20) | NO | PRI | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

| pin | int(11) | YES | | NULL | |

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

4 rows in set (0.11 sec)

mysql> alter table customer modify pin char(10);

Query OK, 1 row affected (0.73 sec)

Records: 1 Duplicates: 0 Warnings: 0

mysql> desc customer;

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

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

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

| customer\_name | char(20) | NO | PRI | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

| pin | char(10) | YES | | NULL | |

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

4 rows in set (0.08 sec)

***Drop:-***

mysql> desc cust;

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

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

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

| customer\_name | char(20) | NO | PRI | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

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

3 rows in set (0.06 sec)

mysql> alter table cust drop primary key;

Query OK, 0 rows affected (0.75 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc cust;

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

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

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

| customer\_name | char(20) | NO | | | |

| customer\_street | char(30) | YES | | NULL | |

| customer\_city | char(30) | YES | | NULL | |

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

3 rows in set (0.09 sec)

mysql> alter table customer drop pin;

Query OK, 0 rows affected (0.78 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from customer;

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

| customer\_name | customer\_street | customer\_city |

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

| Samkit | VIT Hostel Rd | Pune |

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

1 row in set (0.00 sec)

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| cust |

| customer |

| depositor |

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

4 rows in set (0.03 sec)

mysql> drop table customer;

Query OK, 0 rows affected (0.17 sec)

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| depositor |

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

2 rows in set (0.00 sec)

mysql> drop view cust;

Query OK, 0 rows affected (0.00 sec)

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| depositor |

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

3 rows in set (0.00 sec)

mysql> drop index ind\_cust on customer;

Query OK, 0 rows affected (0.22 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> drop index ind1\_cust on customer;

Query OK, 0 rows affected (0.22 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> drop index ind2\_cust on customer;

Query OK, 0 rows affected (0.19 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> show index 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 | customer\_name | A |

2 | NULL | NULL | | BTREE | | |

+----------+------------+----------+--------------+---------------+--------1 row in set (0.00 sec)

***Rename:-***

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| customer |

| depositor |

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

3 rows in set (0.00 sec)

mysql> rename table customer to cust;

Query OK, 0 rows affected (0.22 sec)

mysql> show tables;

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

| Tables\_in\_sam |

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

| account |

| cust |

| depositor |

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

3 rows in set (0.00 sec)

***Truncate:-***

mysql> select \* from cust;

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

| customer\_name | customer\_street | customer\_city |

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

| Aish | NULL | Satara |

| Samkit | VIT Hostel Rd | Pune |

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

2 rows in set (0.03 sec)

mysql> truncate table cust;

Query OK, 0 rows affected (0.30 sec)

mysql> select \* from cust;

Empty set (0.00 sec)

***Sequence:-***

mysql> create table seq(rno int auto\_increment primary key,name char(20));

Query OK, 0 rows affected (0.41 sec)

mysql> insert into seq(name) values('sam');

Query OK, 1 row affected (0.05 sec)

mysql> insert into seq(name) values('aish');

Query OK, 1 row affected (0.04 sec)

mysql> insert into seq(name) values('chin');

Query OK, 1 row affected (0.04 sec)

mysql> insert into seq values(101,'prateek');

Query OK, 1 row affected (0.05 sec)

mysql> insert into seq(name) values('neena');

Query OK, 1 row affected (0.03 sec)

mysql> select \* from seq;

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

| rno | name |

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

| 1 | sam |

| 2 | aish |

| 3 | chin |

| 101 | prateek |

| 102 | neena |

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

5 rows in set (0.00 sec)