Name:Kokate Mansi Sanjay   **Div:B**

Batch:B2   **RollNo:CO3B23**

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ASSIGNMENT NO: 2A

AIM: Design and develop SQL DDL statement which demonstrates the use of SQL objects such as table ,view ,index,seuence,synonym.

(base) sspm@sspm:~$ sudo su [sudo] password for sspm: root@sspm:/home/sspm# service start mysqlid start; start: unrecognized service root@sspm:/home/sspm# mysql -u root -p Enter password:

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

Your MySQL connection id is 10

Server version: 8.0.30-0ubuntu0.20.04.2 (Ubuntu)

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owners.

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

mysql> create database school;

Query OK, 1 row affected (0.13 sec)

mysql> use school;

Database changed

Create table from existing table:

mysql> create table newschool_info(stud_name varchar(20),roll_no int(10),address varchar(20),class int(10),attendance varchar(20),marks int(20));

Query OK, 0 rows affected, 3 warnings (6.32 sec)

mysql> select * from newschool_info;

Empty set (0.00 sec)

mysql> insert into newschool_info values('siddhu',1,'supe',12,'A',70);

Query OK, 1 row affected (0.11 sec)

mysql> insert into newschool_info values('rohit',2,'someshwar',12,'B',75);

Query OK, 1 row affected (0.48 sec)

```
mysql> insert into newschool_info values('vivek',3,'nira',12,'C',80); Query
OK, 1 row affected (0.21 sec)
mysql> select * from newschool_info;
+-----------+---------+-----------+-------+------------+-------+
| stud_name | roll_no | address   | class | attendance | marks |
+-----------+---------+-----------+-------+------------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 |
| rohit     |       2 | someshwar |    12 | B          |    75 |
| vivek     |       3 | nira      |    12 | C          |    80 |
+-----------+---------+-----------+-------+------------+-------+ 3
rows in set (0.00 sec)
```

Create table from existing table with specific field:

```
mysql> create table newschool_info2(stud_name varchar(20),roll_no int(10),address varchar(20));
Query OK, 0 rows affected, 1 warning (0.63 sec)

mysql> select * from newschool_info;
+-----------+---------+-----------+-------+------------+-------+
| stud_name | roll_no | address   | class | attendance | marks |
+-----------+---------+-----------+-------+------------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 |
| rohit     |       2 | someshwar |    12 | B          |    75 |
| vivek     |       3 | nira      |    12 | C          |    80 |
+-----------+---------+-----------+-------+------------+-------+
3 rows in set (0.00 sec)

mysql> select * from newschool_info2;
Empty set (0.00 sec)

mysql> insert into newschool_info2 values('siddhu',1,'supe');
Query OK, 1 row affected (0.82 sec)

mysql> insert into newschool_info2 values('rohit',2,'someshwar');
Query OK, 1 row affected (0.11 sec)

mysql> insert into newschool_info2 values('vivek',3,'nira'); Query
OK, 1 row affected (0.10 sec)

mysql> select * from newschool_info2;
+-----------+---------+-----------+
| stud_name | roll_no | address   |
+-----------+---------+-----------+
| siddhu    |       1 | supe      |
| rohit     |       2 | someshwar |
| vivek     |       3 | nira      |
```

```
+-----------+---------+-----------+ 3
rows in set (0.00 sec)
```

Adding column into table: mysql> alter table
newschool_info add grade varchar(2);
Query OK, 0 rows affected (0.59 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> select * from newschool_info;

```
+-----------+---------+-----------+-------+------------+-------+-------+
| stud_name | roll_no | address   | class | attendance | marks | grade |
+-----------+---------+-----------+-------+------------+-------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 | NULL  |
| rohit     |       2 | someshwar |    12 | B          |    75 | NULL  |
| vivek     |       3 | nira      |    12 | C          |    80 | NULL  |
+-----------+---------+-----------+-------+------------+-------+-------+
3 rows in set (0.00 sec)
```

mysql> update newschool_info set grade='a+' WHERE roll_no=1;
Query OK, 1 row affected (0.10 sec) Rows
matched: 1 Changed: 1 Warnings: 0

mysql> select * from newschool_info;

```
+-----------+---------+-----------+-------+------------+-------+-------+
| stud_name | roll_no | address   | class | attendance | marks | grade |
+-----------+---------+-----------+-------+------------+-------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 | a+    |
| rohit     |       2 | someshwar |    12 | B          |    75 | NULL  |
| vivek     |       3 | nira      |    12 | C          |    80 | NULL  |
+-----------+---------+-----------+-------+------------+-------+-------+
3 rows in set (0.00 sec)
```

mysql> update newschool_info set grade='b' WHERE roll_no=1;
Query OK, 1 row affected (0.10 sec) Rows
matched: 1 Changed: 1 Warnings: 0

mysql> select * from newschool_info;

```
+-----------+---------+-----------+-------+------------+-------+-------+
| stud_name | roll_no | address   | class | attendance | marks | grade |
+-----------+---------+-----------+-------+------------+-------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 | b     |
| rohit     |       2 | someshwar |    12 | B          |    75 | NULL  |
| vivek     |       3 | nira      |    12 | C          |    80 | NULL  |
+-----------+---------+-----------+-------+------------+-------+-------+
3 rows in set (0.01 sec)
```

mysql> alter table newschool_info drop column grade;

Query OK, 0 rows affected (0.51 sec) Records:
0 Duplicates: 0 Warnings: 0

mysql> select * from newschool_info;

```
+-----------+---------+-----------+-------+------------+-------+
| stud_name | roll_no | address   | class | attendance | marks |
+-----------+---------+-----------+-------+------------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 |
| rohit     |       2 | someshwar |    12 | B          |    75 |
| vivek     |       3 | nira      |    12 | C          |    80 |
+-----------+---------+-----------+-------+------------+-------+
```
3 rows in set (0.00 sec)

Create view:

mysql> create view data as select * from newschool_info;
Query OK, 0 rows affected (0.20 sec)

mysql> select * from newschool_info;

```
+-----------+---------+-----------+-------+------------+-------+
| stud_name | roll_no | address   | class | attendance | marks |
+-----------+---------+-----------+-------+------------+-------+
| siddhu    |       1 | supe      |    12 | A          |    70 |
| rohit     |       2 | someshwar |    12 | B          |    75 |
| vivek     |       3 | nira      |    12 | C          |    80 |
+-----------+---------+-----------+-------+------------+-------+ 3
```
rows in set (0.00 sec)

 Create view with specific record: mysql> create view data1 as select
stud_name,roll_no from newschool_info;
Query OK, 0 rows affected (0.17 sec)

mysql> select * from data1;

```
+-----------+---------+
| stud_name | roll_no |
+-----------+---------+
| siddhu    |       1 |
| rohit     |       2 |
| vivek     |       3 |
+-----------+---------+ 3
```
rows in set (0.00 sec)

Update view:
mysql> update data1 set stud_name='gauri' where roll_no=1;
Query OK, 1 row affected (0.10 sec) Rows
matched: 1 Changed: 1 Warnings: 0

mysql> select * from data1;

```
+-----------+---------+
| stud_name | roll_no |
+-----------+---------+
| gauri     |       1 |
| rohit     |       2 |
| vivek     |       3 |
+-----------+---------+ 3
rows in set (0.00 sec)
```

Drop view:
mysql> drop view data1;
Query OK, 0 rows affected (0.13 sec)

Creating index: mysql> create index il on
newschool_info(roll_no);
Query OK, 0 rows affected (0.63 sec)

Records: 0 Duplicates: 0 Warnings: 0 mysql>

show index from newschool_info; +------------

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

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

| Table | Non_unique | Key_name | Seq_in_index | Column_name | Collation | Cardinality | Sub_part | Packed | Null | Index_type | Comment | Index_comment | Visible | Expression |

| newschool_info | 1 | il | 1 | roll_no | A | 3 | NULL | NULL | YES | BTREE | | YES | NULL |

+ 1 row in set (0.55 sec)

Drop index:
mysql> drop index il on newschool_info;
Query OK, 0 rows affected (0.26 sec) Records:
0 Duplicates: 0 Warnings: 0

mysql> show index from newschool_info;
Empty set (0.00 sec)

Creating sequence:
mysql> create table te(roll_no int auto_increment,primary key(roll_no),name varchar(10));
Query OK, 0 rows affected (0.63 sec)

```
mysql> alter table te auto_increment=1;
Query OK, 0 rows affected (0.20 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into te(name) values('gauri'),('pooja'),('priya');
Query OK, 3 rows affected (0.10 sec) Records:
3  Duplicates: 0  Warnings: 0

mysql> select * from te;
+---------+-------+
| roll_no | name  |
+---------+-------+
|       1 | gauri |
|       2 | pooja |
|       3 | priya |
+---------+-------+
3 rows in set (0.00 sec)
```