**Assignment 2**

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

**DataBase used:**

employee(eid,ename,salary)

assignment(projectid,eid)

project(projectid,project\_name,manager)

manager(eid,ename)

**1)Create all tables with identified primary keys and foreign keys**

mysql> create database mydb;

Query OK, 1 row affected (0.01 sec)

mysql> create table employee(eid INT,ename char(20),salary INT,primary key(eid,ename));

Query OK, 0 rows affected (0.06 sec)

mysql> create table project(projectid int,project\_name varchar(20),manager int, foreign key(manager) references employee(eid));

Query OK, 0 rows affected (0.06 sec)

mysql> desc project

-> ;

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

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

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

| projectid | int(11) | YES | | NULL | |

| project\_name | varchar(20) | YES | | NULL | |

| manager | int(11) | YES | MUL | NULL | |

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

3 rows in set (0.00 sec)

**mysql> alter table project add primary key(projectid);**

Query OK, 0 rows affected (0.13 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> create table assignment(projectid int,eid int,foreign key(projectid) references project(projectid),foreign key(eid) references employee(eid));

Query OK, 0 rows affected (0.08 sec)

mysql> create table manager(eid int,ename char(20),foreign key(eid,ename) references employee(eid,ename));

Query OK, 0 rows affected (0.06 sec)

**mysql> alter table employee modify eid int auto\_increment;**

Query OK, 0 rows affected (0.14 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee

-> ;

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

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

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

| eid | int(11) | NO | PRI | NULL | auto\_increment |

| ename | char(20) | NO | PRI | | |

| salary | int(11) | YES | | NULL | |

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

3 rows in set (0.00 sec)

**mysql> insert into employee(ename,salary) values('aakash',20000);**

Query OK, 1 row affected (0.02 sec)

mysql> insert into employee(ename,salary) values('Parth',30000);

Query OK, 1 row affected (0.03 sec)

mysql> select \* from employee;

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

| eid | ename | salary |

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

| 1 | aakash | 20000 |

| 2 | Parth | 30000 |

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

2 rows in set (0.00 sec)

mysql> insert into project values(1,'Bank Management',1);

Query OK, 1 row affected (0.04 sec)

mysql> insert into project values(2,'Content Management',1);

Query OK, 1 row affected (0.04 sec)

mysql> insert into project values(3,'College Management',1);

Query OK, 1 row affected (0.05 sec)

mysql> select \* from project;

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

| projectid | project\_name | manager |

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

| 1 | Bank Management | 1 |

| 2 | Content Management | 1 |

| 3 | College Management | 1 |

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

3 rows in set (0.00 sec)

**2)Create view of employees working on 'Bank Management' project.**

mysql> create or replace view v\_BankProjectTeam as select e.eid,e.ename from employee e,project p,assignment a where p.projectid = a.projectid and p.project\_name='Bank Management' and e.eid = a.eid;

Query OK, 0 rows affected (0.04 sec)

mysql> select \* from v\_BankProjectTeam;

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

| eid | ename |

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

| 1 | aakash |

| 2 | Parth |

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

2 rows in set (0.00 sec)