**SOFTWARE LABORATORY 1**

**GROUP A – EXPERIMENT 1**

**TITLE:**

SQL Queries:

* Design and Develop SQL DDL statements which demonstrate the use of SQL objects such as Table, View, Index, Sequence, Synonym, different constraints etc.
* Write at least 10 SQL queries on the suitable database application using SQL DML statements.

Note: Instructor will design the queries which demonstrate the use of concepts like Insert, Select, Update,

Delete operators, functions, and set operators etc.

**CODE:**

mysql> create database db;

Query OK, 1 row affected (0.01 sec)

mysql> show databases;

|  |
| --- |
| Database |
| db |
| information\_schema |
| mysql |
| performance\_schema |
| sys |

5 rows in set (0.00 sec)

mysql> use db;

Database changed

mysql> create table employe(empid int, name varchar(50), designation varchar(50));

Query OK, 0 rows affected (0.04 sec)

mysql> insert into employe values(1, 'Aza', 'Game Developer'),(2, 'David', 'UI Designer'),(3, 'Tia', 'Project Manager');

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from employe;

|  |  |  |
| --- | --- | --- |
| empid | name | designation |
| 1 | Aza | Game Developer |
| 2 | David | UI Designer |
| 3 | Tia | Project Manager |

3 rows in set (0.00 sec)

mysql> describe employe;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field | Type | Null | Key | Default | Extra |
| empid | int | YES | NULL |  |  |
| name | varchar(50) | YES | NULL |  |  |
| designation | varchar(50) | YES | NULL |  |  |

3 rows in set (0.01 sec)

mysql> rename table employe to employee;

Query OK, 0 rows affected (0.04 sec)

mysql> truncate table employee;

Query OK, 0 rows affected (0.06 sec)

mysql> select \* from employee;

Empty set (0.01 sec)

mysql> insert into employee values(1, 'Aza', 'Game Developer'),(2, 'David', 'UI Designer'),(3, 'Tia', 'Project Manager');

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> alter table employee add salary int;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> update employee set salary = 100000;

Query OK, 3 rows affected (0.01 sec)

Rows matched: 3 Changed: 3 Warnings: 0

mysql> alter table employee modify column salary float;

Query OK, 3 rows affected (0.11 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> describe employee;

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field | Type | Null | Key | Default | Extra |
| empid | int | YES | NULL |  |  |
| name | varchar(50) | YES | NULL |  |  |
| designation | varchar(50) | YES | NULL |  |  |
| salary | float | YES | NULL |  |  |

4 rows in set (0.00 sec)

mysql> alter table employee rename column salary to salaries;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from employee;

|  |  |  |  |
| --- | --- | --- | --- |
| empid | name | designation | salaries |
| 1 | Aza | Game Developer | 100000 |
| 2 | David | UI Designer | 100000 |
| 3 | Tia | Project Manager | 100000 |

3 rows in set (0.00 sec)

mysql> alter table employee drop column salaries;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from employee;

|  |  |  |
| --- | --- | --- |
| empid | name | designation |
| 1 | Aza | Game Developer |
| 2 | David | UI Designer |
| 3 | Tia | Project Manager |

3 rows in set (0.00 sec)

mysql> alter table employee add salaries int;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> update employee set salaries = 100000;

Query OK, 3 rows affected (0.00 sec)

Rows matched: 3 Changed: 3 Warnings: 0

mysql> update employee set salaries = 150000 where empid = 3;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from employee;

|  |  |  |  |
| --- | --- | --- | --- |
| empid | name | designation | salaries |
| 1 | Aza | Game Developer | 100000 |
| 2 | David | UI Designer | 100000 |
| 3 | Tia | Project Manager | 150000 |

3 rows in set (0.00 sec)

mysql> insert into employee values(4, 'Tom', 'Hacker', 10000),(4, 'Tiffany', 'Marketing',125000);

Query OK, 2 rows affected (0.01 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> update employee set empid = 5 where name = 'Tiffany';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from employee;

|  |  |  |  |
| --- | --- | --- | --- |
| empid | name | designation | salaries |
| 1 | Aza | Game Developer | 100000 |
| 2 | David | UI Designer | 100000 |
| 3 | Tia | Project Manager | 150000 |
| 4 | Tom | Hacker | 10000 |
| 5 | Tiffany | Marketing | 125000 |

5 rows in set (0.00 sec)

mysql> select name from employee;

|  |
| --- |
| name |
| Aza |
| David |
| Tia |
| Tom |
| Tiffany |

5 rows in set (0.00 sec)

mysql> select name from employee where salaries = 100000;

|  |
| --- |
| name |
| Aza |
| David |

2 rows in set (0.00 sec)

mysql> delete from employee where empid = 4;

Query OK, 1 row affected (0.01 sec)

mysql> select \* from employee;

|  |  |  |  |
| --- | --- | --- | --- |
| empid | name | designation | salaries |
| 1 | Aza | Game Developer | 100000 |
| 2 | David | UI Designer | 100000 |
| 3 | Tia | Project Manager | 150000 |
| 5 | Tiffany | Marketing | 125000 |

4 rows in set (0.00 sec)

mysql> update employee set empid = 4 where name = 'Tiffany';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from employee;

|  |  |  |  |
| --- | --- | --- | --- |
| empid | name | designation | salaries |
| 1 | Aza | Game Developer | 100000 |
| 2 | David | UI Designer | 100000 |
| 3 | Tia | Project Manager | 150000 |
| 4 | Tiffany | Marketing | 125000 |

4 rows in set (0.00 sec)

mysql> drop table employee;

Query OK, 0 rows affected (0.03 sec)

mysql> show tables;

Empty set (0.00 sec)