**Assignment No : 03**

Design at least 10 SQL queries for suitable database application using SQL DML statements: Insert, Select, Update, Delete with operators, functions and set operators.

**DataBase used in assignment 3:**

employee(eid,ename,salary)

assignment(projectid,eid)

project(projectid,project\_name,manager)

manager(eid,ename)

**\*\*Create Table Queries are in assignment 3**

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> 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)

mysql> insert into assignment values(1,1);

Query OK, 1 row affected (0.05 sec)

mysql> insert into assignment values(1,2);

Query OK, 1 row affected (0.04 sec)

mysql> insert into assignment values(2,3),(2,4);

Query OK, 2 rows affected (0.04 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> select \* from assignment;

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

| projectid | eid |

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

| 1 | 1 |

| 1 | 2 |

| 2 | 3 |

| 2 | 4 |

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

4 rows in set (0.00 sec)

**1)Print all employess with their assigned projects.**

mysql> select e.eid,e.ename,p.project\_name from employee e,project p,assignment a where p.projectid = a.projectid and e.eid = a.eid;

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

| eid | ename | project\_name |

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

| 1 | aakash | Bank Management |

| 2 | Parth | Bank Management |

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

2 rows in set (0.00 sec)

**2)Print employees working on 'Bank Management' Project.**

mysql> 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;

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

| eid | ename |

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

| 1 | aakash |

| 2 | Parth |

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

2 rows in set (0.00 sec)

mysql> insert into employee(ename,salary) values('Aanandi',50000),('Swara',80000),('Venu',90000);

Query OK, 3 rows affected (0.05 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from employee;

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

| eid | ename | salary |

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

| 1 | aakash | 20000 |

| 2 | Parth | 30000 |

| 3 | Aanandi | 50000 |

| 4 | Swara | 80000 |

| 5 | Venu | 90000 |

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

5 rows in set (0.00 sec)

**3)Print names of employess whose salary is greater than 40000**

mysql> select ename from employee where salary >40000;

+---------+

| ename |

+---------+

| Aanandi |

| Swara |

| Venu |

+---------+

3 rows in set (0.00 sec)

**4)Update salary of each employee with increase of Rs.2000;**

mysql> select \* from employee;

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

| eid | ename | salary |

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

| 1 | aakash | 20000 |

| 2 | Parth | 30000 |

| 3 | Aanandi | 50000 |

| 4 | Swara | 80000 |

| 5 | Venu | 90000 |

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

5 rows in set (0.00 sec)

mysql> update employee set salary = salary+2000;

Query OK, 5 rows affected (0.04 sec)

Rows matched: 5 Changed: 5 Warnings: 0

mysql> select \* from employee;

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

| eid | ename | salary |

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

| 1 | aakash | 22000 |

| 2 | Parth | 32000 |

| 3 | Aanandi | 52000 |

| 4 | Swara | 82000 |

| 5 | Venu | 92000 |

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

5 rows in set (0.00 sec)

**5)Display average salary of organization.**

mysql> select avg(salary) from employee;

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

| avg(salary) |

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

| 56000.0000 |

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

1 row in set (0.00 sec)

**6)Display count of employees in organization.**

mysql> select count(\*) from employee;

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

| count(\*) |

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

| 5 |

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

1 row in set (0.00 sec)

**7)Display employee having highest salary in oraganization.**

mysql> select ename,salary from employee where salary = (select max(salary) from employee);

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

| ename | salary |

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

| Venu | 92000 |

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

1 row in set (0.00 sec)

**8)Display Employees working in both projects 'Bank Management' and 'Content Management'.**

mysql> select e.eid,e.ename,p.project\_name from employee e,project p,assignment a where e.eid = a.eid and p.projectid = a.projectid and p.project\_name in ('Bank Management','Content Management');

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

| eid | ename | project\_name |

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

| 1 | aakash | Bank Management |

| 2 | Parth | Bank Management |

| 3 | Aanandi | Content Management |

| 4 | Swara | Content Management |

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

4 rows in set (0.00 sec)

9) Display employees who do not work on 'Bank Management' Project

mysql> select e.eid,e.ename,p.project\_name from employee e,project p,assignment a where e.eid = a.eid and p.projectid = a.projectid and p.project\_name not in ('Bank Management');

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

| eid | ename | project\_name |

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

| 3 | Aanandi | Content Management |

| 4 | Swara | Content Management |

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

2 rows in set (0.00 sec)

10) Delete employee whose id is 5;

mysql> delete from employee where eid = 5;

Query OK, 1 row affected (0.04 sec)

mysql> select \* from employee

-> ;

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

| eid | ename | salary |

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

| 1 | aakash | 22000 |

| 2 | Parth | 32000 |

| 3 | Aanandi | 52000 |

| 4 | Swara | 82000 |

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

4 rows in set (0.00 sec)