**20BCS042 MOHD ADIL**

**ASSIGNMENT 4**

mysql> CREATE DATABASE ASSIGNMENT4;

Query OK, 1 row affected (0.03 sec)

mysql> use ASSIGNMENT4;

Database changed

mysql> create table Employee

-> (Emp\_id int(3) unique,

-> Emp\_name varchar(255),

-> Salary int,

-> Dno varchar(5));

Query OK, 0 rows affected, 1 warning (0.08 sec)

mysql> create table Department

-> (Dno varchar(255) unique,

-> Dept\_name varchar(255));

Query OK, 0 rows affected (0.05 sec)

mysql> insert into Employee values

-> (101,"Amit",25000,"D1001"),

-> (102,"Sunil",20000,"D1002"),

-> (103,"Rakesh",18000,"D1003"),

-> (104,"Ajay",16000,"D1001"),

-> (105,"Suhail",20000,"D1002"),

-> (106,"Arif",18000,"D1004"),

-> (107,"Suresh",24000,"D1002"),

-> (108,"Vijay",22000,"D1003");

Query OK, 8 rows affected (0.01 sec)

Records: 8 Duplicates: 0 Warnings: 0

mysql> insert into Department values

-> ("D1001","IT"),

-> ("D1002","Sales"),

-> ("D1003","Marketing"),

-> ("D1004","HR");

Query OK, 4 rows affected (0.01 sec)

Records: 4 Duplicates: 0 Warnings: 0

**SQL QUERIES**

1. Display total sum required to pay the salary of all employees.

mysql> select sum(salary)

-> as TotalSalary

-> from Employee;

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

| TotalSalary |

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

| 163000 |

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

1 row in set (0.01 sec)

1. Display the average salary, minimum salary and maximum salary of the Company.

mysql> select avg(salary),min(salary),max(salary)

-> from Employee;

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

| avg(salary) | min(salary) | max(salary) |

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

| 20375.0000 | 16000 | 25000 |

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

1 row in set (0.01 sec)

1. Display the sum of salary department-wise.

mysql> select department.dno, department.dept\_name ,sum(salary)

-> from department join employee on department.dno=employee.dno

-> group by dno;

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

| dno | dept\_name | sum(salary) |

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

| D1001 | IT | 41000 |

| D1002 | Sales | 64000 |

| D1003 | Marketing | 40000 |

| D1004 | HR | 18000 |

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

4 rows in set (0.00 sec)

1. Display the maximum salary department-wise.

mysql> select department.dno, department.dept\_name ,max(salary)

-> from department join employee on department.dno=employee.dno

-> group by dno;

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

| dno | dept\_name | max(salary) |

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

| D1001 | IT | 25000 |

| D1002 | Sales | 24000 |

| D1003 | Marketing | 22000 |

| D1004 | HR | 18000 |

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

4 rows in set (0.00 sec)

1. Display the details of the employee who earns the maximum salary.

mysql> select \* from employee

-> where employee.salary=(select max(salary) from employee);

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

| Emp\_id | Emp\_name | Salary | Dno |

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

| 101 | Amit | 25000 | D1001 |

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

1 row in set (0.01 sec)

1. Display details of every employee having maximum salary in his department.

mysql> select Emp\_id, Emp\_name, Department.Dno, Dept\_name, max(salary) from Employee

-> join department on employee.dno=department.dno

-> group by dno;

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

| Emp\_id | Emp\_name | Dno | Dept\_name | max(salary) |

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

| 101 | Amit | D1001 | IT | 25000 |

| 102 | Sunil | D1002 | Sales | 24000 |

| 103 | Rakesh | D1003 | Marketing | 22000 |

| 106 | Arif | D1004 | HR | 18000 |

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

4 rows in set (0.00 sec)

1. Display the details of the employee who earns more salary than the average salary of his department.

mysql> select Emp\_id, Emp\_name, Salary, Department.DNo, Dept\_name from Employee

-> Employee join Department on Employee.Dno=Department.Dno

-> where salary > (select avg(salary) from Employee order by Dno);

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

| Emp\_id | Emp\_name | Salary | DNo | Dept\_name |

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

| 101 | Amit | 25000 | D1001 | IT |

| 107 | Suresh | 24000 | D1002 | Sales |

| 108 | Vijay | 22000 | D1003 | Marketing |

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

3 rows in set (0.01 sec);

1. Display total number of employees in each department along with the department name.

mysql> select dept\_name ,count(emp\_id) from department

-> join employee on department.dno=employee.dno

-> group by department.dno;

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

| dept\_name | count(emp\_id) |

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

| IT | 2 |

| Sales | 3 |

| Marketing | 2 |

| HR | 1 |

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

4 rows in set (0.00 sec)

Thank You