# Dharmsinh Desai University Department of MCA Semester -1

# **Database Management System**

**Term work** 

**Submitted by** 

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1 perform the following using MySQL

Create following tables choose appropriate datatype. And insert appropriate

records according to your choice.

Emp (Eid, Ename, salary,city,depname) Eid is primary key
Leave (leaveid, leavetype) leavetype must be in CL or DL or
ML,

Leaveid is primary key

Emp\_leave(Eid,leaveid,leavedate) Primarykey(Eid,leaveid), Edi is foreign key from EMP table
Leavid is foreign key form Leave table.

#### **Table 1:-**

```
create table Emp (
Eid int Primary key,
Ename varchar(50),
salary int,
city varchar(60),
depname varchar(60)
);
```

```
insert into Emp values
(1, 'Ram', 15000, 'Nadiad', 'sales'),
(2, 'Dinesh', 5000, 'Gdm', 'Account'),
(3, 'Devasish', 10000, 'Gdm', 'sales'),
(4, 'Nikhil', 12000, 'Anjar', 'sales'),
(5 , 'Ayush' , 20000 , 'Bhuj', 'Finance'),
(6, 'Aditya', 13000, 'Surat', 'Finance');
(7, 'Rakesh', 5000, 'Surat', 'Acount');
                    Table 2 :-
create table Leave 1(
  leaveid int primary key,
  leavetype ENUM('CL','DL', 'ML') not null
);
insert into Leave 1 values
(101, 'CL'),
(102, 'CL'),
(103, 'DL'),
(104, 'DL'),
```

```
(105, 'ML'),
(106, 'ML'),
(107, 'ML'),
(108, 'CL');
```

#### <u>Table 3 :-</u>

```
create table Emp_leave(
  Eid int,
  leaveid int,
  leavedate date,
  foreign key (Eid) references Emp(Eid),
  foreign key (leaveid) references Leave_1(leaveid),
  primary key (leaveid, Eid)
);
insert into Emp_leave values
(1, 101, '2018-02-12'),
(2, 102, '2017-04-21'),
(3, 103, '2020-05-26'),
(7, 107, '2020-12-31'),
```

# 1. Display all the Employee whose name start with 'D'

Query:- select \* from Emp where Ename like 'D%';

# **Output:-**

Eid	Ename	Salary	City	Depname
2	Dinesh	5000	Gdm	Account
3	Devasish	10000	Gdm	Sales

# 2. Display all the Employee details whose salary between 10000 to 15000.

Query: - select \* from Emp where salary between 10000 and 15000;

# Output :-

Eid	Ename	Salary	City	Depname
1	Ram	15000	Nadiad	Sales
3	Devasish	10000	Gdm	Sales
4	Nikhil	12000	Anjar	Sales
6	Aditya	13000	Surat	Finance

# 3. Display all the Employee name who has taken leave type CL.

Query:- select Ename from emp where eid in

(select eid from Emp\_leave where leaveid in

(select leaveid from Leave\_1 where leavetype='CL'));

# Output :-

Ename	
Ram	_
Dinesh	_

## 4. Display Eid,, Leaveid which are taken before 12-02-2019.

Query:- select eid, leaveid from emp\_leave where leavedate < '2019-02-12';

## **Output:-**

Eid	Leaveid	
1	101	
2	102	

5 Display of department name and total of salary of each department's employee.

**Query :-** select depname, SUM(salary) from emp group by depname;

#### **Output:-**

depname	SUM(salary)		
Sales	37000		
Account	5000		
Finance	33000		

# 6. Display all the leave type taken from employee rakesh.

#### **Output:-**

Leavetype		
ML		
CL		

# 7 Display all leavedate of leave type DL.

Query :- select leavedate from emp\_leave where leaveid in (
select leaveid from leave\_1 where leavetype = 'DL');

#### **Output:-**

Leavedate			
2020-05-26			
2023-11-22			

# 8 Update the city of employee "rakesh".

Query:- update emp set city='Goa' where ename='Rakesh';

## **Output:-**

Eid	Ename	Salary	City	Depname
7	Rakesh	5000	Goa	Account

# 9. Display leavetype, and number of leaves taken by employee of each leave type.

**Query:** - select leavetype, count(leaveid) from leave\_1 group by leavetype;

#### **Output:-**

Leavetype	Count(leaveid)		
CL	3		
DL	2		
ML	3		

10. Create a stored procedure which pass the department name as arguments and findout display all eid,leaveid,leavedate of all employee of given departments. Also calculate maxsalary . and pass it as OUT variable.

```
delimiter $$
create procedure display(IN dname varchar(60), OUT maxSal
int)
begin
    select * from Emp_leave where eid in (
        select eid from emp where depname= dname
    );
    select max(salary) into maxSal from emp where depname=
dname;
end $$
delimiter;
```

call display('sales' , @maxSal);

# **Output:-**

Eid	Leaveid	Leavedate
1	101	2018-02-12
3	103	2020-05-26
4	104	2023-11-22

# select @maxSal;

@maxSal
15000

11. Create a function disp() which pass the leaveid as argument and display all the employee name who has not taken any leave which is passed as an argument

```
delimiter $$
create function display(leave_id int) returns LONGTEXT
deterministic
    begin
     declare employee_name LONGTEXT;
      select GROUP_CONCAT(ename) into employee_name
from emp where eid in (select eid from emp_leave
        where leaveid not in(select leaveid from leave 1 where
leaveid = leave id));
      return employee_name;
    end $$
  delimiter;
 select display(102);
Output:-
```

# Display(102)

Ram, Devasish, Nikhil, Rakesh

# 12. Add the bonus field with appropriate datatype. Update the bonus based on following condition

If salary less than 5000 bonus is 5%

If salary between 5001 – 10000 bonus is 6%

Else bonus is 7%

Query:- alter table emp add bonus int;

update emp set bonus = case

WHEN salary < 5000 THEN salary \* 0.05

WHEN salary BETWEEN 5001 AND 10000 THEN salary \* 0.06

ELSE salary \* 0.07

END;

## **Output:-**

Eid	Ename	Salary	City	Depname	bonus
1	Ram	15000	Nadiad	sales	1050
2	Dinesh	5000	Gdm	Account	350
3	Devasish	10000	Gdm	Sales	600
4	Nikhil	12000	Anjar	Sales	840
5	Ayush	20000	Bhuj	Finance	1400
6	Aditya	13000	Surat	Finance	910
7	Rakesh	5000	Goa	Account	350