**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');

**Table 3 :-**

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'),

(7 , 108 , '2020-10-15');

(4 , 104 , '2023-11-22');

**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.**

**Query :-** select leavetype from leave\_1 where leaveid in (

select leaveid from emp\_leave where eid in (

select eid from emp where ename='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 |