DBMS LAB

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REG NO.- 19BBS0026

1.Consider the following relations Departments (Dcode, name, empid) Employees(empid, fname, lname,Dcode,Salary) Projects(Pid, Dcode, description, startdate,enddate, revenue), Workson(Pid,empid,assigned time) 1. Find the description of all projects with no employees assigned to them. 2. For each employee, list the employee ID, number of projects, and the total percentage of time for the current projects to which she is assigned. Include employees not assigned to any project. 3. List the project IDs for the projects that started on or before July 1, 2020. 4. List the ID and descriptions of the projects under the departments with code ACCNT, CNSLT, or HDWRE. 5. List all of the information about employees with last names that have exactly 8 characters and end in 'ware'. 6. List the ID and last name of all employees who work for department ACTNG and make less than 30,000. 7. List the “magical” projects that have not started (indicated by a start date in the future or NULL) but are generating revenue. 8. List the IDs of the projects either from the ACTNG department or that are ongoing (i.e., NULL end date). Exclude any projects that have revenue of $50,000 or less. 9. For each project, find the greatest percentage of time assigned to one employee.. Multi Line Text.

SQL Worksheet

```
1  INSERT INTO departments VALUES (100, "Gaurav", 001);
2
3  INSERT INTO departments VALUES (101, "Saurabh", 002);
4
5  INSERT INTO departments VALUES (102, "Utsav", 003);
6
7  INSERT INTO departments VALUES (103, "Karan", 004);
```

```
1 row(s) inserted 1 row(s) inserted 1 row(s) inserted 1 row(s) inserted
```

Statement 2

```
Create table employees(
Empid int not null,
Fname varchar(20) not null,
Lname varchar(20) not null,
Dcode int not null,
Salary int not null,
PRIMARY KEY (Empid),
Foreign key (Dcode) references departments(Dcode))
```

Table created.

SQL Worksheet

```
1  Insert into employees values(001,'gaurav','singh',001,50000);
2  Insert into employees values(001,'karan','singh',001,50000);
3  Insert into employees values(001,'sonu','singh',001,50000);
4  Insert into employees values(001,'arpit','singh',001,50000);
```

SQL Worksheet

```
1  Insert into projects values(001,001,'chatbot','01-jan-2020','10-jan-2020',50000);
2  Insert into projects values(001,001,'hello','01-jan-2020','10-jan-2020',50000);
3  Insert into projects values(001,001,'cdone','01-jan-2020','10-jan-2020',50000);
4  Insert into projects values(001,001,'camazon','01-jan-2020','10-jan-2020',50000);
```

SQL Worksheet

```
1  Insert into workson values(001,001,10);
2  Insert into workson values(002,002,11);
3  Insert into workson values(003,003,12);
4  Insert into workson values(004,004,13);
```

Statement 3

```
Alter table departments add constraint depfk foreign key (Empid) references employees(Empid)
```

Table altered.

Statement 4

```
Create table projects(
Pid int not null,
Dcode int not null,
Description varchar(255) not null,
Startdate date not null,
Enddate date not null,
Revenue int not null,
Primary key (pid),
Foreign key (Dcode) references departments (Dcode)
)
```

Table created.

Statement 14

```
Select pid from projects where startdate > '1-jul-2020'
```

no data found

Statement 15

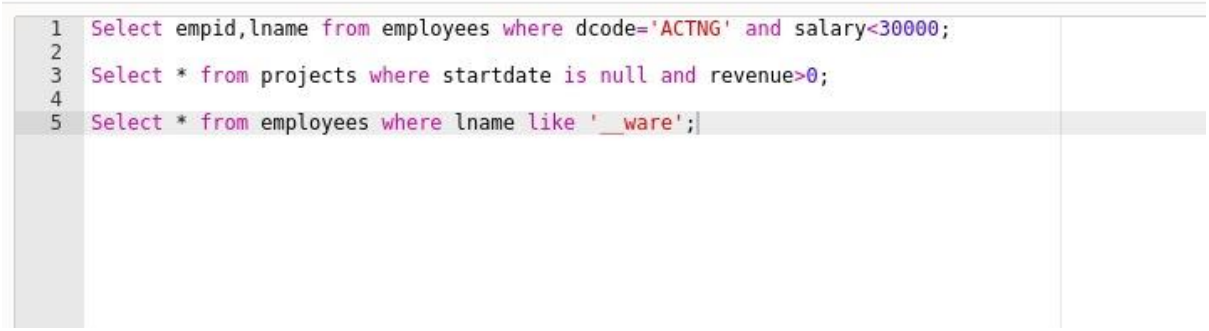
```
Select pid, decription from projects where Dcode in ('ACCNT','CNSLT','HDWRE')
```

Statement 9

```
Select description from projects where Dcode IS NULL
```

no data found

SQL Worksheet



```
1  Select empid,lname from employees where dcode='ACTNG' and salary<30000;
2
3  Select * from projects where startdate is null and revenue>0;
4
5  Select * from employees where lname like '__ware';
```

Queries:

: Select pid from projects where startdate > '1-jul-2020';

: Select pid, decription from projects where Dcode in ('ACCNT','CNSLT','HDWRE');

: Select empid,lname from employees where dcode='ACTNG' and salary<30000;

: Select * from projects where startdate is null and revenue>0;

: Select * from employees where lname like '__ware';

SELECT projects.description FROM employees INNER JOIN workson ON (employees.employeeid= workson.employeeid) INNER JOIN projects ON (workson.projectid= projects.projectid) WHERE workson.project IS NULL

:

: SELECT employeeid, COUNT(workson.projectid), workson.assignedtime FROM employees INNER JOIN workson ON (employees.employeeid= workson.employeeid) INNER JOIN projects ON (workson.projectid= projects.projectid)