

## SET:1

1. Create the below tables along with key constraints and write and Insert Script for insertion of rows with Substitution variables and insert appropriate data.

```
Create table department  
(  
  Dept-no numeric,  
  Dept-name varchar(10),  
  Location varchar(10);  
);
```

1. Insert into department values  
(1, 'Sales', 'Delhi'),  
(2, 'IT', 'Mumbai'),  
(3, 'Production', 'Mumbai'),  
(4, 'Marketing', 'Ahmedabad'),  
(5, 'Analysis', 'Surat'),  
(6, 'BCA', 'MP'),  
(7, 'BBN', 'Bareilly');

## 2. query:-

1. Display all Department belonging to location 'Surat'.

→ Select \* From Department  
where location like "Surat";



2. list all department name starting with 'A'.

→ Select \* From Department  
where dept\_name like "A%";

3. list all Department whose number is between 1 and 100.

→ Select \* From Department  
where dept\_no between 1 and 100;

4. Delete 'TRG' Department.

→ Delete From Department  
where dept\_name = "TRG";

5. Change Department name 'BBA' to 'IT'.

→ update Department  
Set dept\_name = "BBA"  
where dept\_name = "IT";

6. update the location whose dept\_name second letter is 'a'

→ update Department  
Set location = "goc"  
where dept\_name like "-a%";



7 Display whose location is 'Baroda', 'Surat',  
and 'Ahmedabad'.

→ Select \* From department  
Where location = "Surat" or location = "baroda",  
or location = "Ahmedabad";

8 Display whose are not from "Sales" and  
marketing' department

→ Select \* From department  
Where dept\_name not like "Sales"  
and dept\_name not like "marketing";

9 list all records of each table in as  
order

→ Select \* From Department order by Department  
Select \* From employee order by emp\_name;

10. Employee (emp-id, emp-name, gender, dept-no, address,  
designation, Salary, experience, email);

→ Create table employee (emp-id numeric, emp-name  
varchar(20), designation varchar(20), gender  
varchar(10), dept-no int references department  
(dept-no), address varchar(20), Salary numeric,  
experience numeric, email varchar(20);



⇒ Insert into employee values

C1, "Bachi", "Female", 1, "dubai", "CEO", 8000, 5,  
"Bachi@gmail.com");

C2, "Dixi", "Female", "us", "worker", 10,000, 6,  
"Dixi@gmail.com");

C3, "Pankaj", "Male", "us", "worker", 20,000, 7,  
"Pankaj@gmail.com");

C4, "Parth", "Male", "dubai", "CEO", 50,000, 8,  
"Parth@gmail.com");

C5, "Roham", "Male", "Bardoli", "doctor", 70,000, 9,  
"Roham@gmail.com");

\* query :-

10. Display Female employee list

→ Select \* From employee  
where gender = "Female";

11. Display all record by order emp-name

⇒ Select \* From Employee  
order by emp-name asc;

12. Find name of employee who has salary less  
than 5000 and greater than 2000

⇒ Select emp\_name From employee  
where salary < 5000 and salary > 2000;



13. Display names and the designation of all female employee in designation order.

⇒ Select emp\_name, designation from employee  
where gender = "female"  
order by emp\_no desc;

14. Display name of all the employee who start with 'A' ends with 'A';

⇒ Select emp\_name from employee  
where emp\_name like 'a%' e

or

⇒ emp\_name like '%a%';

15. Find the name of employee and salary for those who had obtain maximum salary.

⇒ Select emp\_name, salary from employee  
where salary (select min (salary) from employee)

⇒ Select emp\_name, min (salary) as  
"lowest salary" from employee;



16. Add 10% raise in Salary of all employee whose Department is 'IT'.

⇒ update employee  
Set Salary = (Salary \* 100) / 100  
where designation = "manager";

⇒ update employee Set Salary = Salary +  
(Salary \* 10/100) Where dept-no =  
(Select dept-name from dept-name = "it");

17. List name of employee who are Fresher's  
(less than 1 year of experience)

⇒ Select emp\_name from employee  
where experience < 1;

18. List department wise name of employee who  
has more than 5 year of experience.

⇒ Select emp\_name, experience from employee  
where experience > 5;

⇒ Select employee.emp\_name from department  
inner join employee on  
department.dept-no = employee.dept-no  
where experience > 5  
order by dept-name asc;



19 list department having no employee

⇒ Select \* from department  
where dept\_no  
not in (Select dept\_no from employee);

20 Delete the employee whose salary is  
less than 10000

⇒ Delete from employee  
where salary < 10,000;



SET-2

Create the below three tables along with key constraints and write an Insert Script for insertions of rows with Substitution variables and insert appropriate data.

STUDENT (rollno, name, class, birthdate)

COURSE (courseno, coursename, max\_marks, pers. mark)

SC (rollno, courseno, marks)

Create table students

C

rollno int primary key  
name varchar(20),  
class varchar(20),  
Birthdate date);

insert into students values

C1, "Rishi", "FY", "1-Jun-2003")

C2, "Parth", "FY", "2-Apr-2003")

C3, "Ranjit", "FY", "12-Nov-2004")

C4, "Diyu", "SY", "5-Jan-2004")

C5, "Mansi", "SY", "14-Feb-2004")

C6, "Jharnvi", "SY", "6-Mar-2004")



```
Create table Coursec  
(  
  Courseno int primary key  
  CourseName varchar,  
  Max Marks int,  
  Pass Marks int);
```

```
Insert into Course values  
(101, "Maths", 100, 35),  
(102, "DBMS", 100, 35),  
(201, "CN", 100, 35),  
(202, "CPPM", 100, 35),  
(301, "OS", 100, 35),  
(302, "PS", 100, 35),  
(303, "practical", 300, 150);
```

```
pragma Foreign-Keys = on;
```

```
Create table SC2  
(  
  rollno int references Students (rollno),  
  Courseno int references Course (Courseno),  
  Marks int  
);
```

```
Insert into SC2 values  
(1, 101, 60), (1, 102, 55);  
(2, 101, 90), (2, 102, 88);  
(3, 101, 40), (5, 102, 34);  
(4, 201, 72), (4, 202, 70);
```



(5, 201, 55), (5, 202, 38);  
(6, 201, 88), (6, 202, 74);  
(7, 301, 41), (7, 302, 44);  
(8, 301, 65), (8, 302, 73);  
(9, 301, 50), (9, 302, 61);

1. Display details of Student who takes 'DBMS' Course.

⇒ Select Students, rollno, name, class, birthdate, Course, CourseName From (C Students inner join SC2 on Students. rollno = SC2.rollno) inner join Course on SC2 CourseNo = Course CourseNo) where CourseName = "DBMS";

2. Display the name of Student who have Scored more than 70% in Computer Networks and have not failed in any Subject.

⇒ Select name From (C Students inner join SC2 on Students. rollno = SC2.rollno) inner join Course on SC2 CourseNo = Course CourseNo) where Course CourseName = "Computer Networks" and SC2.marks >= (70 \* 100) / 100 and SC2.marks >= 35;



3. Display the average marks obtained by each student.

⇒ Select Students.name, avg (Sc2.marks) as "Avg marks" from Students inner joins Sc2 on Students.rollno = Sc2.rollno group by Students.name;

4. Select all Courses where passing marks are more than 30% of average maximum marks.

⇒ Select CourseName from Course where pass.marks = (Select avg (max\_marks) \* 30/100 from Course);

5. Display all Course name.

⇒ Select CourseName from Course;

6. Display the Student detail who have secured 1<sup>st</sup> rank in 'Computer Network' Course

⇒ Select Students.rollno, Students.name, Students.class, Students.birthdate, max (Sc2.marks) as "max marks" from Students inner join Sc2 on Students.rollno = Sc2.rollno where Sc2.CourseNo = 201;



7. Display all S<sub>1</sub> Student list along with Course name.

=> Select distinct Students.name, Students.class, Course.name from (Students inner join SC2 on Students.rollno = SC2.rollno) inner join Course on SC2.courseno = Course.courseno where Students.class = "S<sub>1</sub>" group by Students.name;

8. Display The Average Marks obtained by each student.

=> Select Students.name, avg(SC2.marks) as "Avg Marks" from Students inner join SC2 on Students.rollno = SC2.rollno group by Students.name;