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Institute of Computer Technology

B. Tech Computer Science and Engineering

Sub: Database Management System (2CSE301)

Practical 7: Perform queries using joins, sub query, set operations, group by and having.

Employee				
eid	ename	Address	dept	salary
1	Ram	chd	HR	10000
2	Amit	delhi	MRKT	20000
3	Ravi	pune	HR	30000
4	Nitin	bang	MRKT	40000
5	Varun	chd	IT	50000

Project			
Eid	Pid	pname	Location
1	P1	IOT	bang
5	P2	BIG Data	delhi
3	P3	Retail	mumbai
4	P4	Android	hyderabad

Q.1) Write an SQL query to display maximum salary from employee table.

```
34 -- Q.1) Write an SQL query to display maximum salary from employee table.
35 • select max(salary) as maximum_salary from employee;
36
37 -- Q.2) Write an SQL query to display employee name who is taking maximum salary
38 • select ename from employee where salary=(select max(salary) from employee);
39
```

Result Grid

maximum_salary
50000

Q.2) Write an SQL query to display employee name who is taking maximum salary.

```
--
37 -- Q.2) Write an SQL query to display employee name who is taking maximum salary.
38 • select ename from employee where salary=(select max(salary) from employee);
39
```

Result Grid

ename
Varun

Q.3) Write an SQL query to display second highest salary from employee table?

```
39
40 -- Q.3) Write an SQL query to display second highest salary from employee table?
41 • SELECT MAX(Salary) AS SecondHighestSalary
42 FROM Employee
43 WHERE Salary < (SELECT MAX(Salary) FROM Employee);
44
45 -- Q.4) Write an SQL query to display employee name who is taking second highest
```

Result Grid

SecondHighestSalary
40000

Q.4) Write an SQL query to display employee name who is taking second highest salary.

```
44
45 -- Q.4) Write an SQL query to display employee name who is taking second highest
46 -- salary.
47 • SELECT ename
48 FROM Employee
49 WHERE Salary = (
50 SELECT MAX(Salary)
51 FROM Employee
52 WHERE Salary < (SELECT MAX(Salary) FROM Employee)
53 );
54
55 -- Q.5) Write an SQL query to display all the dept names along with no of employee
```

Result Grid

ename
Nitin

Q.5) Write an SQL query to display all the dept names along with no of employees working in it.

```
55 -- Q.5) Write an SQL query to display all the dept names along with no of employees
56 -- working in it.
57 • SELECT dept, COUNT(*) AS NumberOfEmployees
58 FROM Employee
59 GROUP BY dept;
60
61 -- Q.6) Write an sql query to display all the employee names where no. of employees :
```

Result Grid

	dept	NumberOfEmployees
▶	HR	2
	MRKT	2
	IT	1

Q.6) Write an sql query to display all the employee names where no. of employees are less than 2.

```
60
61 -- Q.6) Write an sql query to display all the employee names where no. of employees are
62 -- less than 2.
63 • SELECT Ename
64 FROM Employee
65 GROUP BY Ename
66 HAVING COUNT(*) < 2;
67
```

Result Grid

	Ename
▶	Ram
	Amit
	Ravi
	Nitin
	Varun

Employee 9 x

Q.7) Display the name of employee who works in department having count of employee less than 2.

```
68 -- Q.7) Display the name of employee who works in department having count of employee
69 -- less than 2.
70 • SELECT ename
71 FROM Employee
72 WHERE dept IN (
73     SELECT dept
74     FROM Employee
75     GROUP BY dept
76     HAVING COUNT(*) < 2
77 );
78
```

Result Grid

ename
Varun

Q.8) Write a query display highest salary department wise and name of employee who is taking that salary.

```
79 -- Q.8) Write a query display highest salary department wise and name of employee who
80 -- is taking that salary.
81 • SELECT dept, Salary, ename
82 FROM Employee
83 WHERE salary in (select max(salary) from employee group by dept);
84
```

Result Grid

dept	Salary	ename
HR	30000	Ravi
MRKT	40000	Nitin
IT	50000	Varun

Q.9) Find the name of employees who are working on a project?

```
85 -- Q.9) Find the name of employees who are working on a project?
86 • SELECT Employee.ename
87 FROM Employee
88 INNER JOIN Project ON Employee.eid = Project.Eid;
89
```

Result Grid

	ename
▶	Ram
	Ravi
	Nitin
	Varun

Q.10) Find the details of employee who is working on at least one project?

```
89
90 -- Q.10) Find the details of employee who is working on at least one project?
91 • SELECT *
92 FROM Employee
93 WHERE eid IN (
94     SELECT DISTINCT eid
95     FROM Project
96 );
97
```

Result Grid

	eid	ename	address	dept	salary
▶	1	Ram	chd	HR	10000
	3	Ravi	pune	HR	30000
	4	Nitin	bang	MRKT	40000
	5	Varun	chd	IT	50000
*	NULL	NULL	NULL	NULL	NULL