



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)



DEPARTMENT OF MECHATRONICS

SQL

ASSIGNMENT -4

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SQL ASSIGNMENT 4

Questions:

create database eeee;

use eeee;

**CREATE TABLE Employees (
 emp_id INT PRIMARY KEY,
 name VARCHAR(50),
 dept_id INT
);**

**CREATE TABLE Departments (
 dept_id INT PRIMARY KEY,
 dept_name VARCHAR(50)
);**

INSERT INTO Employees (emp_id, name, dept_id) VALUES

(1, 'Ravi', 101),

(2, 'Priya', 102),

(3, 'Karan', 101),

(4, 'Anjali', 103),

(5, 'Manish', NULL);

INSERT INTO Departments (dept_id, dept_name) VALUES

(101, 'IT'),

(102, 'HR'),

(103, 'Finance'),

(104, 'Marketing');

1.)Find employees who are in the “IT” department.

Query with output:

```

27 • SELECT e.emp_id, e.name, d.dept_name
28 FROM Employees e
29 INNER JOIN Departments d ON e.dept_id = d.dept_id
30 WHERE d.dept_name = 'IT';

```

Result Grid			Filter Rows:		Export:		Wrap Cell Content:	
	emp_id	name	dept_name					
▶	1	Ravi	IT					
	3	Karan	IT					

2.) List departments with no employees.

Query with output:

```

31 • SELECT d.dept_id, d.dept_name
32 FROM Departments d
33 LEFT JOIN Employees e ON d.dept_id = e.dept_id
34 WHERE e.emp_id IS NULL;
35

```

Result Grid			Filter Rows:		Export:		Wrap Cell Content:	
	dept_id	dept_name						
▶	104	Marketing						





3.) Show each employee's name along with every department they could potentially work in.

Query with output:

```

35 • SELECT e.name, d.dept_name
36 FROM Employees e
37 CROSS JOIN Departments d;

```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	name	dept_name
▶	Ravi	Marketing
	Ravi	Finance
	Ravi	HR
	Ravi	IT
	Priya	Marketing
	Priya	Finance
	Priya	HR
	Priya	IT
	Karan	Marketing
	Karan	Finance
	Karan	HR
	Karan	IT
	Anjali	Marketing
	Anjali	Finance
	Anjali	HR



4.)_Get all employees and all departments (even if no match).

Query with output:

```

38 • SELECT e.name, d.dept_name
39 FROM Employees e
40 LEFT JOIN Departments d ON e.dept_id = d.dept_id
41 UNION
42 SELECT e.name, d.dept_name
43 FROM Employees e
44 RIGHT JOIN Departments d ON e.dept_id = d.dept_id;

```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	name	dept_name
▶	Ravi	IT
	Priya	HR
	Karan	IT
	Anjali	Finance
	Manish	NULL
	NULL	Marketing

5.)Find employees who do not belong to any department.

Query with output:

```
45 • SELECT e.emp_id, e.name
46     FROM Employees e
47     LEFT JOIN Departments d ON e.dept_id = d.dept_id
48     WHERE d.dept_id IS NULL;
```

Result Grid |   Filter Rows: | Export:  | Wrap Cell Content: 

	emp_id	name
►	5	Manish