```
DROP TABLE IF EXISTS Employees;
DROP TABLE IF EXISTS Departments;
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');
SELECT e.emp_id, e.name, d.dept_name
FROM Employees e
INNER JOIN Departments d
```

```
  ON e.dept_id = d.dept_id
WHERE d.dept_name = 'IT';
SELECT d.dept_id, d.dept_name
FROM Departments d
LEFT JOIN Employees e
  ON d.dept_id = e.dept_id
WHERE e.emp_id IS NULL;
SELECT e.name, d.dept_name
FROM Employees e
CROSS JOIN Departments d;
SELECT e.name, d.dept_name
FROM Employees e
LEFT JOIN Departments d
  ON e.dept_id = d.dept_id
UNION
SELECT e.name, d.dept_name
FROM Employees e
RIGHT JOIN Departments d
  ON e.dept_id = d.dept_id;
SELECT e.emp_id, e.name
FROM Employees e
LEFT JOIN Departments d
  ON e.dept_id = d.dept_id
WHERE d.dept_id IS NULL;
--------+-------+-----------+
| emp_id | name  | dept_name |
+--------+-------+-----------+
|      1 | Ravi  | IT        |
```

```
|     3 | Karan | IT       |
+--------+-------+-----------+
+---------+-----------+
| dept_id | dept_name |
+---------+-----------+
|     104 | Marketing |
+---------+-----------+
+--------+-----------+
| 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        |
| Anjali | IT        |
| Manish | Marketing |
| Manish | Finance   |
```

| Manish | HR |

| Manish | IT |

+--------+-----------+

+--------+-----------+

| name | dept_name |

+--------+-----------+

| Ravi | IT |

| Priya | HR |

| Karan | IT |

| Anjali | Finance |

| Manish | NULL |

| NULL | Marketing |

+--------+-----------+

+--------+--------+

| emp_id | name |

+--------+--------+

| 5 | Manish |

+--------+--------+