

```
mysql> CREATE TABLE Employee (  
->     EmpID INT PRIMARY KEY,  
->     EmpName VARCHAR(50),  
->     DeptID INT  
-> );  
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> INSERT INTO Employee (EmpID, EmpName, DeptID) VALUES  
-> (1, 'Alice', 101),  
-> (2, 'Bob', 102),  
-> (3, 'Charlie', 103),  
-> (4, 'David', NULL);  
Query OK, 4 rows affected (0.02 sec)  
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> select * from Employee;  
+-----+-----+-----+  
| EmpID | EmpName | DeptID |  
+-----+-----+-----+  
| 1     | Alice   | 101    |  
| 2     | Bob     | 102    |  
| 3     | Charlie | 103    |  
| 4     | David   | NULL   |  
+-----+-----+-----+  
4 rows in set (0.00 sec)
```

```
mysql> CREATE TABLE Department (  
->     DeptID INT PRIMARY KEY,  
->     DeptName VARCHAR(50)  
-> );  
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> INSERT INTO Department (DeptID, DeptName) VALUES  
-> (101, 'HR'),  
-> (102, 'IT'),  
-> (103, 'Finance'),  
-> (104, 'Marketing');  
Query OK, 4 rows affected (0.02 sec)  
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> select * from Department;  
+-----+-----+  
| DeptID | DeptName |  
+-----+-----+  
| 101    | HR       |  
| 102    | IT       |  
| 103    | Finance  |  
| 104    | Marketing|  
+-----+-----+
```

```
mysql> CREATE VIEW EmpDept AS
-> SELECT Employee.EmpName, Department.DeptName
-> FROM Employee
-> INNER JOIN Department ON Employee.DeptID = Department.DeptID;
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> select * from EmpDept;
```

EmpName	DeptName
Alice	HR
Bob	IT
Charlie	Finance

3 rows in set (0.00 sec)

```
mysql> CREATE INDEX idx_deptname ON Employee(DeptID);
Query OK, 0 rows affected (0.08 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql>
mysql> SELECT EmpName, DeptID
-> FROM Employee
-> WHERE DeptID = 102;
```

EmpName	DeptID
Bob	102

1 row in set (0.00 sec)

```
mysql>
```

```
mysql>
mysql> SELECT Employee.EmpName, Department.DeptName
      -> FROM Employee
      -> LEFT OUTER JOIN Department ON Employee.DeptID = Department.DeptID;
```

```
+-----+
| EmpName | DeptName |
+-----+
| Alice   | HR       |
| Bob     | IT       |
| Charlie | Finance  |
| David   | NULL     |
+-----+
```

```
4 rows in set (0.00 sec)
```

```
mysql>
mysql> SELECT Employee.EmpName, Department.DeptName
      -> FROM Employee
      -> RIGHT OUTER JOIN Department ON Employee.DeptID = Department.DeptID;
```

EmpName	DeptName
Alice	HR
Bob	IT
Charlie	Finance
NULL	Marketing

```
4 rows in set (0.00 sec)
```

```
mysql>
```