

LAB-31/10/2025

```
create database employee;
```

```
use employee;
```

```
CREATE TABLE DEPT (  
  DEPTNO VARCHAR(10) PRIMARY KEY,  
  DNAME VARCHAR(50) NOT NULL,  
  DLOC VARCHAR(50)  
);
```

```
INSERT INTO DEPT VALUES
```

```
(10,'HR','Bengaluru'),
```

```
(20,'Finance','Hyderabad'),
```

```
(30,'IT','Mysuru'),
```

```
(40,'Sales','Chennai'),
```

```
(50,'Marketing','Pune'),
```

```
(60,'R&D','Delhi');
```

```
CREATE TABLE PROJECT (  
  PNO VARCHAR(10) PRIMARY KEY,  
  PNAME VARCHAR(50),  
  PLOC VARCHAR(50)  
);
```

```
INSERT INTO PROJECT VALUES
```

```
(1001,'Payroll System','Bengaluru'),
```

```
(1002,'Tax Automation','Hyderabad'),
```

```
(1003,'ERP Upgrade','Mysuru'),
```

```
(1004,'CRM App','Chennai'),
```

```
(1005,'Ad Campaign','Pune'),
```

```
(1006,'AI Research','Delhi');
```

```
CREATE TABLE EMPLOYEE (  
EMPNO VARCHAR(10) PRIMARY KEY,  
ENAME VARCHAR(50) NOT NULL,  
MGR_NO VARCHAR(10),  
HIREDATE DATE,  
SAL DECIMAL(10,2),  
DEPTNO VARCHAR(10),  
FOREIGN KEY (DEPTNO) REFERENCES DEPT (DEPTNO)  
);
```

```
INSERT INTO EMPLOYEE VALUES  
( 'E101','Aarav',NULL,'2025-01-01',75000.00,'10'),  
( 'E102','Diya','E101','2025-02-01',55000.00,'20'),  
( 'E103','Ravi','E101','2025-02-15',60000.00,'30'),  
( 'E104','Kiran','E103','2025-03-01',50000.00,'30'),  
( 'E105','Meena','E101','2025-03-10',52000.00,'40'),  
( 'E106','Rohit','E101','2025-04-01',70000.00,'60');
```

```
CREATE TABLE INCENTIVES (  
EMPNO VARCHAR(10),  
INCENTIVE_DATE DATE,  
INCENTIVE_AMOUNT DECIMAL(10 , 2 ),  
PRIMARY KEY (EMPNO , INCENTIVE_DATE),  
FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE (EMPNO)  
);
```

```
INSERT INTO INCENTIVES VALUES
```

```
('E101','2025-01-15',5000),  
('E102','2025-02-20',3000),  
('E104','2025-03-10',2500),  
('E105','2025-03-15',2000),  
('E106','2025-04-01',6000),  
('E101','2025-05-01',1500);
```

```
CREATE TABLE ASSIGNED_TO (  
EMPNO VARCHAR(10),  
PNO VARCHAR(10),  
JOB_ROLE VARCHAR(50),  
PRIMARY KEY (EMPNO , PNO),  
FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE (EMPNO),  
FOREIGN KEY (PNO) REFERENCES PROJECT (PNO)  
);
```

```
INSERT INTO ASSIGNED_TO VALUES  
('E101',1001,'Manager'),  
('E102',1002,'Analyst'),  
('E103',1003,'Developer'),  
('E104',1003,'Tester'),  
('E105',1004,'Sales Executive'),  
('E106',1006,'Researcher');
```

```
SELECT e.EMPNO  
FROM EMPLOYEE e, PROJECT p, ASSIGNED_TO a  
WHERE a.PNO=p.PNO AND a.EMPNO=e.EMPNO AND p.PLOC IN ('BENGALURU', 'HYDERABAD',  
'MYSURU');
```

	EMPNO
▶	E101
	E102
	E103
	E104

```

SELECT e.EMPNO
FROM EMPLOYEE e
WHERE NOT EXISTS( SELECT 'X'
FROM INCENTIVES i
WHERE e.EMPNO=i.EMPNO);

```

	EMPNO
▶	E103
✱	NULL

```

SELECT e.ENAME, e.EMPNO, d.DNAME, A.JOB_ROLE, d.DLOC, p.PLOC
FROM EMPLOYEE e, DEPT d, PROJECT p, ASSIGNED_TO a
WHERE e.EMPNO=a.EMPNO AND a.PNO=p.PNO AND e.DEPTNO=d.DEPTNO AND
D.DLOC=P.PLOC;

```

	ENAME	EMPNO	DNAME	JOB_ROLE	DLOC	PLOC
▶	Aarav	E101	HR	Manager	Bengaluru	Bengaluru
	Diya	E102	Finance	Analyst	Hyderabad	Hyderabad
	Ravi	E103	IT	Developer	Mysuru	Mysuru
	Kiran	E104	IT	Tester	Mysuru	Mysuru
	Meena	E105	Sales	Sales Executive	Chennai	Chennai
	Rohit	E106	R&D	Researcher	Delhi	Delhi