-- List employees with their department name & location

select E.EMPNO,E.ENAME,D.DNAME,D.DLOC

FROM EMPLOYEE E , DEPT D

WHERE E.DEPTNO=D.DEPTNO;

EMPNO	ENAME	DNAME	DLOC
101	Amit	HR	Mumbai
102	Riya	Finance	Delhi
103	Raj	IT	Bangalore
104	Sneha	Sales	Pune
105	Karan	Marketing	Chennai
106	Meera	R&D	Hyderabad

-- Employees who are not assigned to any project ,Project-wise headcount

SELECT E.EMPNO, E.ENAME

FROM EMPLOYEE E

LEFT JOIN ASSIGNED_TO A ON E.EMPNO = A.EMPNO

WHERE A.PNO IS NULL;

EMPNO	ENAME

```
SELECT P.PNAME, COUNT(A.EMPNO)

FROM PROJECT P

LEFT JOIN ASSIGNED_TO A ON P.PNO = A.PNO

GROUP BY P.PNAME;
```

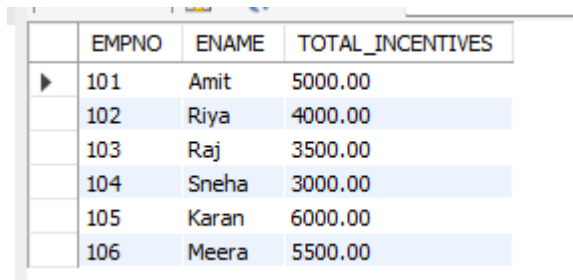| PNAME	COUNT(A.EMPNO)
Payroll System	1
Audit Automation	1
AI Chatbot	1
CRM Development	1
Ad Campaign	1
Product Prototype	1

-- Department-wise average & max salary

```
SELECT D.DNAME, AVG(E.SAL) AS AVG_SALARY, MAX(E.SAL) AS MAX_SALARY

FROM EMPLOYEE E

JOIN DEPT D ON E.DEPTNO = D.DEPTNO

GROUP BY D.DNAME;
```

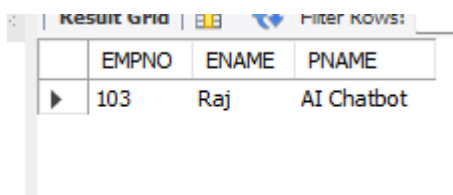| DNAME	AVG_SALARY	MAX_SALARY
HR	50000.000000	50000.00
Finance	60000.000000	60000.00
IT	55000.000000	55000.00
Sales	48000.000000	48000.00
Marketing	70000.000000	70000.00
R&D	65000.000000	65000.00

-- Total incentives earned by each employee (lifetime)

SELECT E.EMPNO, E.ENAME, SUM(I.INCENTIVE_AMOUNT) AS TOTAL_INCENTIVES

FROM EMPLOYEE E

JOIN INCENTIVES I ON E.EMPNO = I.EMPNO

GROUP BY E.EMPNO, E.ENAME;

EMPNO	ENAME	TOTAL_INCENTIVES
101	Amit	5000.00
102	Riya	4000.00
103	Raj	3500.00
104	Sneha	3000.00
105	Karan	6000.00
106	Meera	5500.00

-- Employees working on a given project (project name :Alpha Project)

SELECT E.EMPNO, E.ENAME, P.PNAME

FROM EMPLOYEE E

JOIN ASSIGNED_TO A ON E.EMPNO = A.EMPNO

JOIN PROJECT P ON A.PNO = P.PNO

WHERE P.PNAME = 'AI Chatbot';

	Result Grid	Filter Rows:	
	EMPNO	ENAME	PNAME
▶	103	Raj	AI Chatbot

-- Departments with no employees

SELECT D.DEPTNO, D.DNAME

FROM DEPT D

LEFT JOIN EMPLOYEE E ON D.DEPTNO = E.DEPTNO

WHERE E.EMPNO IS NULL;

DEPTNO	DNAME

-- Managers and their direct report counts (MGR_NO references EMPNO)

SELECT M.EMPNO AS MANAGER_ID, M.ENAME AS MANAGER_NAME, COUNT(E.EMPNO) AS REPORT_COUNT

FROM EMPLOYEE E

JOIN EMPLOYEE M ON E.MGR_NO = M.EMPNO

GROUP BY M.EMPNO, M.ENAME;

MANAGER_ID	MANAGER_NAME	REPORT_COUNT
101	Amit	2
102	Riya	1
103	Raj	1
104	Sneha	1

-- Employees assigned to more than one project.

SELECT EMPNO, COUNT(PNO) AS PROJECT_COUNT

FROM ASSIGNED_TO

GROUP BY EMPNO

HAVING COUNT(PNO) > 1;

Result Grid | Filter Rows:

EMPNO	PROJECT_COUNT