1.

SELECT M.EMPLOYEE\_ID, M.FIRST\_NAME, M.LAST\_NAME, COUNT(E.EMPLOYEE\_ID) AS NumberOfEmployees

FROM EMPLOYEES E

JOIN EMPLOYEES M ON E.MANAGER\_ID = M.EMPLOYEE\_ID

GROUP BY M.EMPLOYEE\_ID, M.FIRST\_NAME, M.LAST\_NAME

HAVING COUNT(E.EMPLOYEE\_ID) > 6

2.

SELECT

D.DEPARTMENT\_ID,

D.DEPARTMENT\_NAME,

MIN(E.SALARY \* (1 - COALESCE(E.COMMISSION\_PCT, 0))) AS MinSalaryAfterCommission,

MAX(E.SALARY \* (1 - COALESCE(E.COMMISSION\_PCT, 0))) AS MaxSalaryAfterCommission

FROM

EMPLOYEES E

JOIN

DEPARTMENTS D ON E.DEPARTMENT\_ID = D.DEPARTMENT\_ID

GROUP BY

D.DEPARTMENT\_ID, D.DEPARTMENT\_NAME

3.

SELECT TOP 1

R.REGION\_NAME,

COUNT(E.EMPLOYEE\_ID) AS EmployeeCount

FROM

EMPLOYEES E

JOIN

DEPARTMENTS D ON E.DEPARTMENT\_ID = D.DEPARTMENT\_ID

JOIN

LOCATIONS L ON D.LOCATION\_ID = L.LOCATION\_ID

JOIN

COUNTRIES C ON L.COUNTRY\_ID = C.COUNTRY\_ID

JOIN

REGIONS R ON C.REGION\_ID = R.REGION\_ID

GROUP BY

R.REGION\_NAME

ORDER BY

EmployeeCount DESC

4.

WITH DepartmentAvg AS (

SELECT

D.DEPARTMENT\_ID,

D.DEPARTMENT\_NAME,

AVG(E.SALARY) AS AvgSalary

FROM

EMPLOYEES E

JOIN

DEPARTMENTS D ON E.DEPARTMENT\_ID = D.DEPARTMENT\_ID

GROUP BY

D.DEPARTMENT\_ID, D.DEPARTMENT\_NAME

),

OverallAvg AS (

SELECT

AVG(E.SALARY) AS OverallAvgSalary

FROM

EMPLOYEES E

)

SELECT

DA.DEPARTMENT\_ID,

DA.DEPARTMENT\_NAME,

DA.AvgSalary,

OA.OverallAvgSalary,

ROUND((DA.AvgSalary - OA.OverallAvgSalary) / OA.OverallAvgSalary \* 100, 2) AS SalaryDifferencePercent

FROM

DepartmentAvg DA, OverallAvg OA

ORDER BY

SalaryDifferencePercent DESC

5.

SELECT

JH.EMPLOYEE\_ID,

JH.DEPARTMENT\_ID,

D.DEPARTMENT\_NAME,

DATEDIFF(YEAR, JH.START\_DATE, JH.END\_DATE) AS YearsWorked

FROM

JOB\_HISTORY JH

JOIN

DEPARTMENTS D ON JH.DEPARTMENT\_ID = D.DEPARTMENT\_ID

WHERE

DATEDIFF(YEAR, JH.START\_DATE, JH.END\_DATE) > 10

6 .

WITH RankedSalaries AS (

SELECT

E.EMPLOYEE\_ID,

E.FIRST\_NAME,

E.LAST\_NAME,

E.SALARY,

ROW\_NUMBER() OVER (ORDER BY E.SALARY DESC) AS SalaryRank

FROM

EMPLOYEES E

)

SELECT

EMPLOYEE\_ID,

FIRST\_NAME,

LAST\_NAME,

SALARY,

SalaryRank

FROM

RankedSalaries

WHERE

SalaryRank BETWEEN 5 AND 10