Cognizant Deep Skilling - Week 2 SQL Exercises

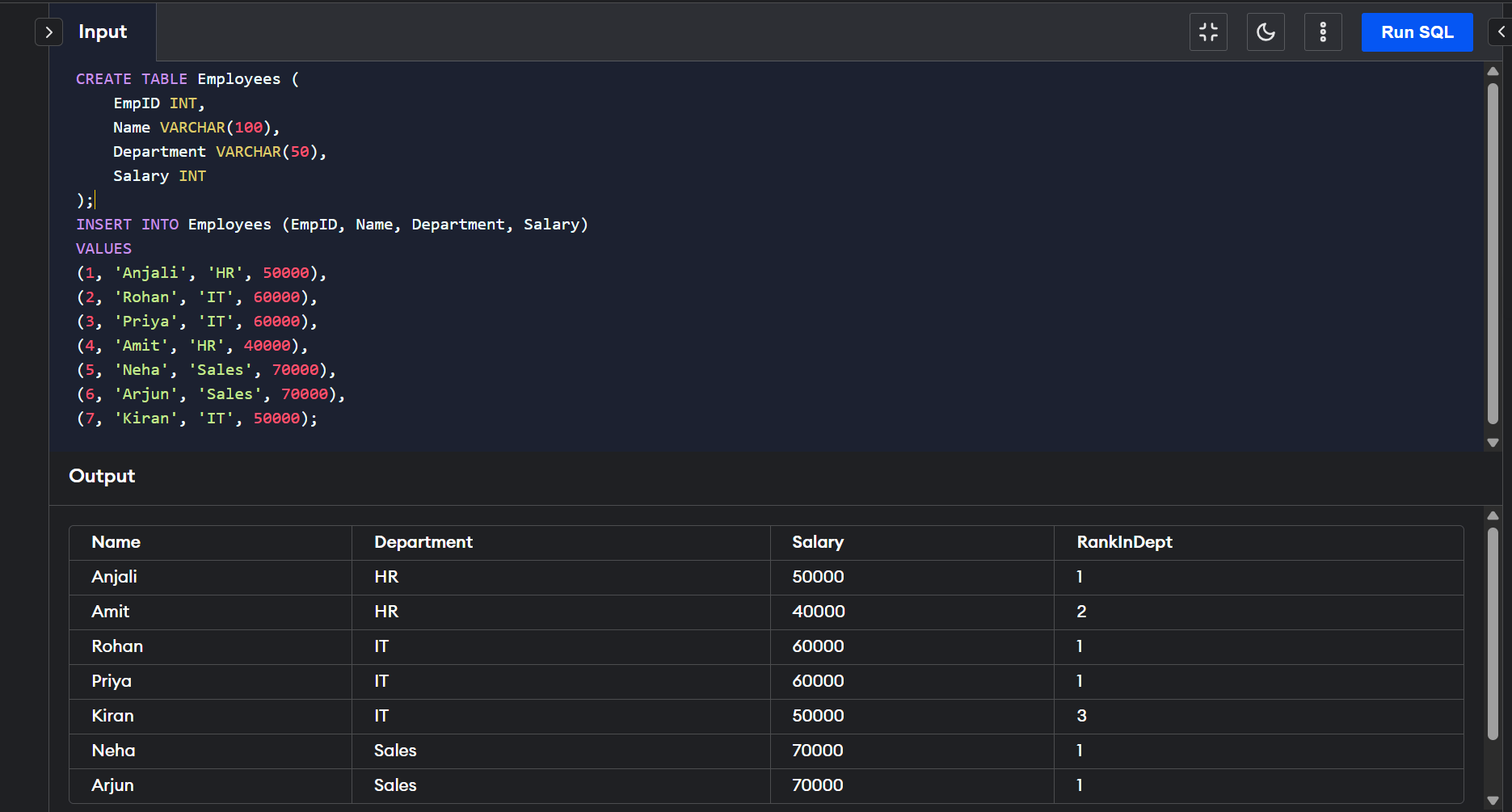
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# Exercise 1: Ranking and Window Functions

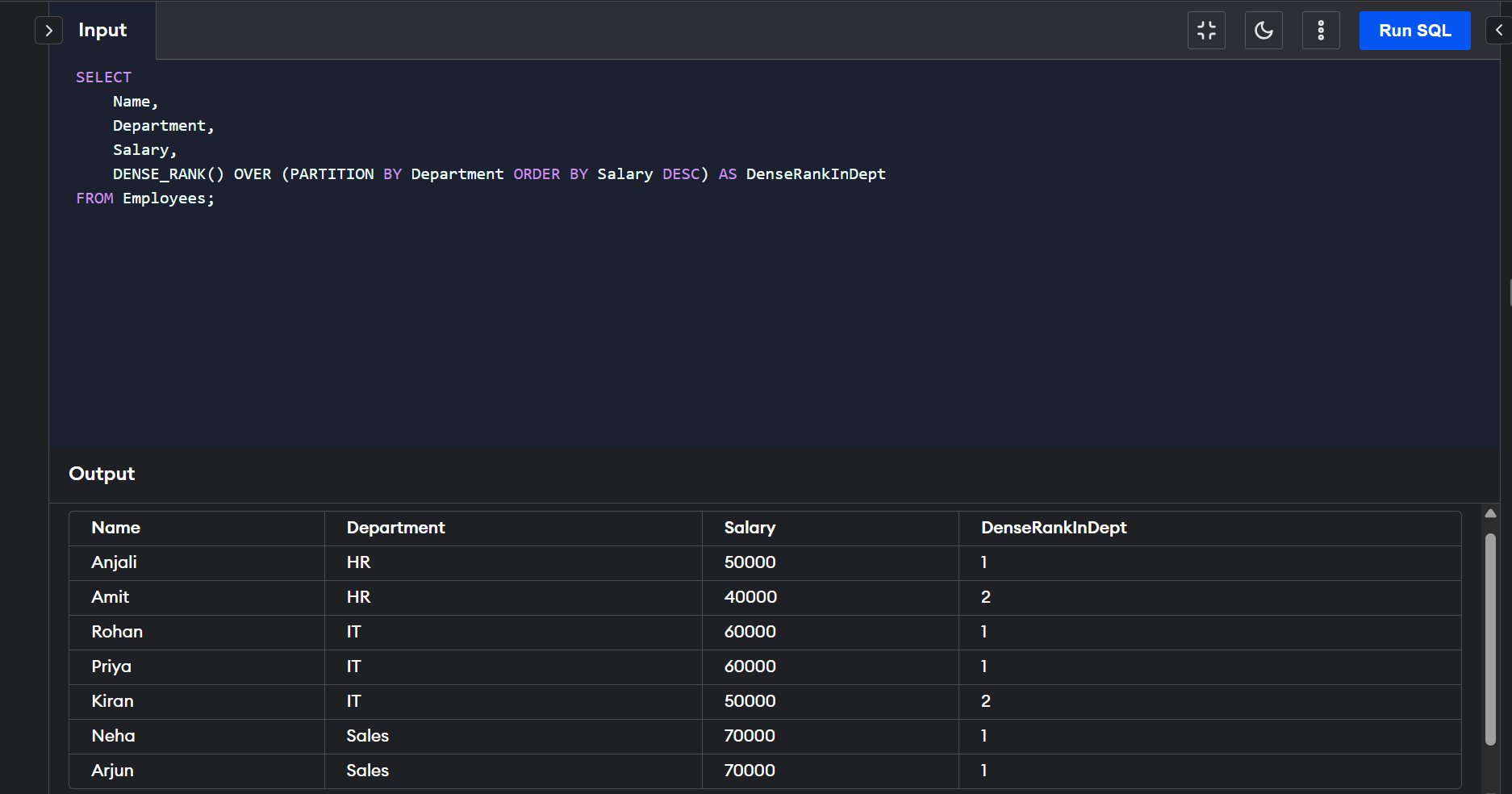
## Table Creation and Sample Data

CREATE TABLE Employees (  
 EmpID INT,  
 Name VARCHAR(100),  
 Department VARCHAR(50),  
 Salary INT  
);  
  
INSERT INTO Employees VALUES  
(1, 'Anjali', 'HR', 50000),  
(2, 'Rohan', 'IT', 60000),  
(3, 'Priya', 'IT', 60000),  
(4, 'Amit', 'HR', 40000),  
(5, 'Neha', 'Sales', 70000);



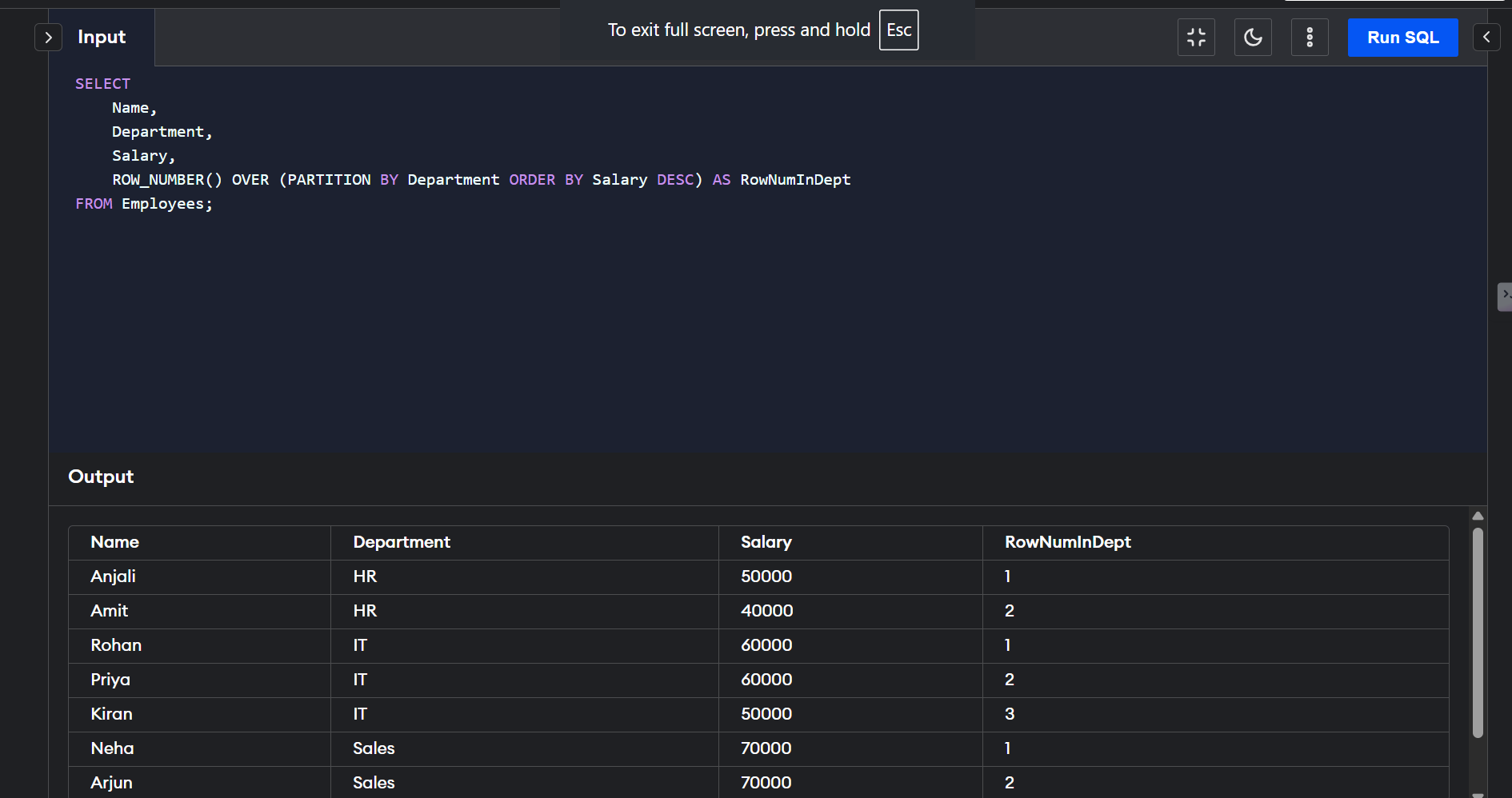
## Query using DENSE\_RANK()

SELECT  
 Name,  
 Department,  
 Salary,  
 DENSE\_RANK() OVER (PARTITION BY Department ORDER BY Salary DESC) AS DenseRankInDept  
FROM Employees;



## Query using ROW\_NUMBER()

SELECT  
 Name,  
 Department,  
 Salary,  
 ROW\_NUMBER() OVER (PARTITION BY Department ORDER BY Salary DESC) AS RowNumInDept  
FROM Employees;



# Exercise 2: Create a Stored Procedure

## Procedure to Insert New Employee

DELIMITER //  
CREATE PROCEDURE InsertEmployee (  
 IN emp\_id INT,  
 IN emp\_name VARCHAR(100),  
 IN dept VARCHAR(50),  
 IN sal INT  
)  
BEGIN  
 INSERT INTO Employees (EmpID, Name, Department, Salary)  
 VALUES (emp\_id, emp\_name, dept, sal);  
END //  
DELIMITER ;  
  
CALL InsertEmployee(6, 'Kiran', 'IT', 55000);  
SELECT \* FROM Employees;



# Exercise 3: Return Data from a Stored Procedure

## Procedure to Retrieve Employees by Department

DELIMITER //  
CREATE PROCEDURE GetEmployeesByDept (  
 IN dept\_name VARCHAR(50)  
)  
BEGIN  
 SELECT \* FROM Employees WHERE Department = dept\_name;  
END //  
DELIMITER ;  
  
CALL GetEmployeesByDept('IT');

