

Lesson 22

Topic: DAX Practice

Prerequisites: Download HR_Analytics.csv file

1. Top Performer Identification by Department

Task:

Write a measure that returns the Employment_id of the top performer (highest Performance_Score) in each department.

2. Year-over-Year Promotion Growth

Task:

Create a measure that calculates the **% increase or decrease in promotions** compared to the previous year.

→ Assume Hire_Date is used as a reference for the year.

3. Average Salary of Employees Who Resigned Within 2 Years

Task:

Calculate the **average monthly salary** of employees who resigned and had Years_at_company less than or equal to 2.

4. Rank Employees by Satisfaction Score Within Their Department

Task:

Create a **DAX measure** or **calculated column** that ranks employees by Employee_Satisfaction_Score within their Department.

5. Correlation Between Training Hours and Performance

Task:

Calculate the **Pearson correlation coefficient** between Training_Hours and Performance_Score.

6. % of Employees Doing Remote Work Frequently

Task:

Write a measure that calculates the **percentage of employees** whose Remote_Work_Frequency is either "Weekly" or "Daily".

7. Employees With Consistently High Performance Over Tenure**Task:**

Identify employees with a Performance_Score of **4 or higher** for **every year at the company**.

📌 You'll need to assume or simulate a performance score per year using tenure approximation.

8. Department-Wise Salary Budget Utilization**Task:**

Calculate the **total salary cost** of each department and compare it against a predefined budget table using a **RELATED** or **LOOKUP** mechanism.

9. Attrition Risk Index**Task:**

Create a custom score to predict resignation risk using a formula like:

DAX

CopyEdit

```
IF(
    Employee_Satisfaction_Score < 3 &&
    Overtime_Hours > 10 &&
    Sick_Days > 5,
    "High",
    IF(Employee_Satisfaction_Score < 4, "Medium", "Low")
)
```

10. Identify Overworked but Unpromoted Employees**Task:**

Count employees who:

- Work more than **45 hours per week** (Work_Hours_per_Week)
- Have more than **5 Overtime_Hours**
- Have Promotions = 0