

Coding Challenge – Stress Level Analysis

An organization is conducting a wellness program to monitor employees' **stress levels**. They have collected survey and activity data, including **work hours, sleep, exercise, caffeine intake, and stress ratings**.

Management wants to understand the **factors contributing to stress**, identify **at-risk employees**, and track stress patterns over time to design better workplace policies.

As a **Data Analyst**, your task is to analyze the dataset and build a **Power BI dashboard** that gives actionable insights on stress levels.

Objective

To analyze employee stress levels, identify patterns and correlations, and provide insights to improve **employee well-being** and **workplace productivity**.

Dataset Description (Sample Fields)

Column Name Description

EmployeeID	Unique employee identifier
Department	Employee department
Age	Employee age
Gender	Male/Female
WorkHours	Average daily work hours
SleepHours	Average daily sleep hours
ExerciseHours	Average weekly exercise hours
CaffeineIntake	Daily coffee/tea cups
StressLevel	Stress rating (1 = Low, 5 = Very High)
DateRecorded	Date of survey/record

Tasks to Perform

1. KPIs

- Avg Stress Level (company-wide)
- % of Employees with High Stress (StressLevel \geq 4)
- Avg Sleep Hours vs Avg Work Hours

2. DAX Measures

- High Stress %
- Avg Sleep vs Work Ratio

3. Visualizations

- **Column Chart:** Avg Stress Level by Department
- **Line Chart:** Stress Level trend over time
- **Scatter Plot:** Work Hours vs Stress Level (with trend line)
- **Donut Chart:** Stress Levels distribution (Low, Medium, High)
- **Conditional Formatting:** Highlight employees with **StressLevel = 5** and **SleepHours < 5**

Deliverables

- Power BI Dashboard (.pbix) with KPIs, charts, and slicers (Department, Gender, Age Group)
- DAX measures for Stress %, Sleep-Work ratio, and Avg Stress
- Insights report (3–5 bullet points, e.g., “IT Department has the highest average stress level due to long working hours”)