

## **DATASET 6 – College Students' Academic Stress & Lifestyle**

**File:** dataset\_6.csv

**Dependent variable (Y):** StressScore

**Independent variables (X):** WeeklyScreentimeHours, CoCurricularHours, SleepQualityScore  
(+ Gender as subgroup)

### **Variable description**

- ID – Student ID (1–50)
- Gender – 0 = Male, 1 = Female
- WeeklyScreentimeHours – Screen time hours per week
- CoCurricularHours – Hours per week spent on clubs/sports/other activities
- SleepQualityScore – Self-rated sleep quality (1 = very poor, 5 = very good)
- StressScore – Academic stress score (10–60, higher = more stress)

### **Suggested project questions**

1. **Objective & Intro:** How are screen time, co-curricular involvement, and sleep quality related to academic stress among college students?
2. **Descriptive statistics**
  - A. Compute mean and SD of StressScore, WeeklyScreentimeHours, and SleepQualityScore.
  - B. Compare mean StressScore between male and female students.
3. **Data visualization**
  - A. Plot a histogram or boxplot of StressScore. Are there any outliers?
  - B. Make a scatterplot of StressScore vs WeeklyScreentimeHours.
4. **Regression analysis**
  - A. Fit a simple regression: StressScore (Y) vs WeeklyScreentimeHours (X). Interpret the slope: how much does stress increase per extra screen time in hour?
  - B. Fit another model: StressScore vs SleepQualityScore. Is the slope negative (better sleep → less stress)?
5. **Subgroup comparison**
  - A. Fit StressScore vs WeeklyScreentimeHours separately for males and females.
  - B. Does the effect of screen time in hours on stress differ by gender?