NOVA SCHOOL OF BUSINESS & ECONOMICS

2494 - COMPUTATIONAL THINKING & DATA SCIENCE

2021-22, Spring Semester

In-class Exercises

UNDERSTANDING EXPERIMENTAL DATA

1. EDP wants to predict the peak power load (i.e., the maximum amount of power that must be generated each day to meet demand) as a function of the daily high temperature (X) in Setúbal. A random sample of 25 summer days is chosen and the peak power load (in megawatts) and the high temperature (in Celsius degrees) are recorded each day. The file peakpower.xlsx contains these observations.
    a. Create a scatterplot for these data and comment on the relationship between X and Y.
    b. Estimate an appropriate regression equation to predict the peak power load for EDP.
    c. Use equation from b) to predict the peak power load on a summer day with high temperature of 38 degrees.