Lab-6 Data Distribution

Lab-1: Understanding Symmetry in Data Distribution

Question:

A store tracks the daily sales (in $) for 15 days:
`[200, 220, 250, 240, 230, 210, 200, 270, 260, 250, 230, 210, 220, 240, 250].`

1. Plot a histogram of the sales data.
2. Identify whether the distribution is **symmetrical**, **positively skewed**, or **negatively skewed**.
3. Explain what the shape of the distribution indicates about the sales pattern.

Lab-2: Comparing Normal Distribution with Real Data

Question:

The heights of 50 students are recorded (in cm):
`[160, 162, 161, 159, 160, 161, 163, 162, 160, 164, 161, 162, 159, 160, 161,`
`163, 164, 160, 159, 161, 162, 160, 163, 159, 161, 162, 163, 160, 159, 164,`
`161, 162, 159, 160, 161, 164, 162, 160, 161, 159, 160, 162, 163, 161, 160,`
`159, 164, 160, 161, 162].`

1. Plot a histogram of the heights and overlay a normal distribution curve.
2. Determine if the data approximates a normal distribution.