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Assignment - 3.

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Name :- HARSHITA

Course :- BCA (cyber Security).

Module :- Foundations of Data Driven

Task 1:

Compute, Mean, Median and Standard deviation

Day	Sales
Mon	1200
Tue	1500
Wed	1100
Thu	1800
Fri	1700
Sat	1900
Sun	1300

Formulas

Mean = Sum of all values / Total no. of values

Median = middle value (after sorting)

Standard deviation (SD) = $\sqrt{(\sum(x - \text{mean})^2)/n}$

$$\text{Mean} = (1200 + 1500 + 1100 + 1800 + 1700 + 1900 + 1300) / 7 = 1500$$

Calculation

$$\text{Median} = 1500$$

$$SD \approx 295.8$$

Result

$$\text{Mean} = 1500$$

$$\text{Median} = 1500$$

$$SD = 295.8$$

Task 2: Create 3 different charts

- 1 ■ Bar chart - Daily sales: Shows which day had the highest and lowest sales (Sat highest, wed lowest).
- 2 ■ Histograms - Frequency of sales Range: Most sales fall between 1300 - 1900
- 3 ■ Scatter plot : Day vs sales : Sales increase toward weekend.

Task 3 Reflection how visuals storytelling helps

- Make data easy to understand and remember
- Charts and Graphs shows pattern faster than reading numbers.
- helps identify trends (like steady growth or sudden drops)
- useful for managers and team to make quick and confident decisions
- It turns raw data into clear story. "Sales are increasing but June need attention"

Example:-

instead of just saying "sales increased,"
the bar and line charts show how
strongly them grew

That's the power of visualisation - it turns
data into insight and action