

Excel Assignment - Solutions & Explanation

Case Study Summary

You are analyzing a 2023 sales dataset from 'TechGear Solutions' with 1000 records. Each record contains employee sales information like product, units, price, and region. You are required to perform tasks from basic to advanced Excel.

Assignment Solutions

1. Basic Analysis

- Total Records: =COUNTA(A2:A1001)
- Average/Min/Max Units Sold:
=AVERAGE(E2:E1001)
=MIN(E2:E1001)
=MAX(E2:E1001)
- Total_Sale Formula: =E2*F2

2. Conditional Formatting

- Highlight Units_Sold > 40: =E2>40
- Highlight Total_Sale:
Red if <10000: =G2<10000
Green if >25000: =G2>25000

3. Logical & Statistical Functions

- Classify High/Low Sales: =IF(G2>20000, "High", "Low")
- Count Sales in IT Dept: =COUNTIF(C2:C1001, "IT")
- Sum Sales per Region: =SUMIF(G2:G1001, "North", G2:G1001)

4. Text and Date Functions

- Extract Month: =TEXT(H2, "mmmm")
- Extract Year: =YEAR(H2)

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5. Lookup Functions

- VLOOKUP Unit_Price: =VLOOKUP("Laptop", D2:F1001, 3, FALSE)
- XLOOKUP Department: =XLOOKUP("E0050", A2:A1001, C2:C1001)

6. Pivot Tables & Charts

- Total Sales by Region: Pivot Rows: Region, Values: Total_Sale
- Avg Units per Department: Pivot Rows: Department, Values: Avg Units
- Bar Chart: Insert from Pivot with Region on X and Sales on Y
- Line Chart: Add Month column, use Pivot to plot Total_Sale by Month

7. Advanced Challenge

- Top 5 Employees: Sort Total_Sale Desc
- Highest Avg Unit Price Product: Pivot Rows: Product, Values: Avg Unit_Price
- Performance Category:
=IF(G2>30000, "Excellent", IF(G2>=20000, "Good", "Needs Improvement"))