# P03 Sample Solution Report – Data Cleaning & Excel Dashboard

## Overview

This report summarises the methodology and key findings for the practical. All computations are based on the provided synthetic dataset.

### Dataset Snapshot

Date Product Region Sales Quantity  
2025-01-01 Tablet West 50792.45 17.0  
2025-01-02 Laptop South 72066.25 13.0  
2025-01-03 Laptop South 45394.43 3.0  
2025-01-04 Laptop East 61204.76 10.0  
2025-01-05 Accessory East 36131.75 2.0

### Summary Statistics

* Sales\_mean: 49928.71
* Sales\_median: 49639.56
* Sales\_mode: 36131.75
* Sales\_var: 143470248.75
* Sales\_std: 11977.91
* Quantity\_mean: 10.07
* Quantity\_median: 9.00
* Quantity\_mode: 19.00
* Quantity\_var: 34.73
* Quantity\_std: 5.89

### Correlation Matrix

Sales Quantity  
Sales 1.000000 0.012947  
Quantity 0.012947 1.000000

### Interpretation

After cleaning, the dataset presents a reliable basis for analysis. The dashboard highlights which regions and products contribute most to overall sales.

### Validation Tips

Double‑check the number of records before and after cleaning. Test different imputation strategies on a copy of the data to see how summaries change.