Dessert Shop Analysis Instructions



Contents

[1. Formatting 1](#_Toc173423327)

[2. Calculating Total Revenue and Profitability 1](#_Toc173423328)

[3. Functions and Formulas 1](#_Toc173423329)

[4. Macros 1](#_Toc173423330)

[5. Data Visualisation Using Charts and Graphs 1](#_Toc173423331)

[6. Filters and Custom Sort 2](#_Toc173423332)

[7. What-If Analysis 2](#_Toc173423333)

[8. Security 2](#_Toc173423334)

[9. Lookup Function 2](#_Toc173423335)

[10. Pivot Table 2](#_Toc173423336)

[11. SWITCH Function 2](#_Toc173423337)

# 1. Dataset

Download and open the **Dessert\_dataset.csv** file in Excel.

# 2. Formatting

* **Format the worksheet**:
  + Bold and center-align the header row.
  + Set the Price per Unit and Total Revenue columns to currency format.
  + Apply a border around the entire data range.
  + Use conditional formatting to highlight Customer Rating cells with a rating of 4.5 and above in green.

# 3. Calculating Total Revenue and Profitability

* **Calculate Total Revenue** in column F using the formula =D2\*E2 and drag down to apply to all rows.
* **Determine profitability**: For the shop to remain profitable, each dessert must generate at least £300 in revenue. In a new column Profitable, use a formula to mark each dessert as "Yes" or "No" based on this criterion.

# 4. Functions and Formulas

* **Calculate the percentage of desserts** that are rated above 4.5. Use the COUNTIF and COUNTA functions to determine the number and percentage.

# 5. Macros

* **Record a macro** named UpdateInventory that:
  + Updates the Inventory Remaining for "Chocolate Cake" to 25.
  + Adjusts the inventory based on new sales figures entered in the Units Sold column.

# 6. Data Visualisation Using Charts and Graphs

* Create a **bar chart** showing Total Revenue by Dessert Name.
* Create a **line chart** to display the trend in Customer Ratings across different Dessert Categories.

# 7. Filters and Custom Sort

* **Apply a filter** to the data range.
* **Sort the data** by Category in alphabetical order and then by Total Revenue in descending order.

# 8. What-If Analysis

* Use **Goal Seek** to determine the necessary Units Sold for "Cheesecake" to reach a Total Revenue of £600.

# 9. Security

* **Protect the worksheet** with a password (Dessert2024) to prevent editing of the Price per Unit and Total Revenue columns.

# 10. Lookup Function

* In a new sheet, use a **VLOOKUP** function to find the Price per Unit for a dessert when its name is entered in a separate cell.

# 11. Pivot Table

* Create a **Pivot Table** to summarise total revenue by Category and Customer Rating.
* Place the Pivot Table in a new worksheet and format it for readability.

# 12. SWITCH Function

* Add a new column Dessert Type next to Category.
* Use the **SWITCH function** to categorise the desserts into:
  + "Cakes" and "Pies" as "Baked Goods"
  + "Muffins" and "Brownies" as "Small Bites"
  + "Pastries" as "Pastry"
  + Default to "Other" for any other categories