Creating Visualisations in Excel

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# Steps to Create Each Visualization

## 1. Clustered Column Chart

**Purpose**: Compare purchase amounts across different regions.

* Select the data range A1:I51.
* Go to the Insert tab.
* In the Charts group, click Insert Column or Bar Chart.
* Select Clustered Column.
* Right-click on the chart and choose Select Data.
* Click Add under Legend Entries (Series).
* For Series name, select SalesAmount.
* For Series values, select the range F2:F51.
* Click OK.
* Click Edit under Horizontal (Category) Axis Labels.
* Select the range H2:H51.
* Click OK.

## 2. Clustered Bar Chart

**Purpose:** Compare the number of products sold across different categories.

* Select the data range A1:I51.
* Go to the Insert tab.
* In the Charts group, click Insert Column or Bar Chart.
* Select Clustered Bar.
* Right-click on the chart and choose Select Data.
* Click Add under Legend Entries (Series).
* For Series name, select QuantitySold.
* For Series values, select the range G2:G51.
* Click OK.
* Click Edit under Horizontal (Category) Axis Labels.
* Select the range E2:E51.
* Click OK.

## 3. Line Chart

**Purpose:** Show the trend of purchase amounts over time.

* Select the data range A1:F51.
* Go to the Insert tab.
* In the Charts group, click Insert Line or Area Chart.
* Select Line with Markers.
* Right-click on the chart and choose Select Data.
* Click Add under Legend Entries (Series).
* For Series name, select SalesAmount.
* For Series values, select the range F2:F51.
* Click OK.
* Click Edit under Horizontal (Category) Axis Labels.
* Select the range B2:B51.
* Click OK.

## 4. Doughnut Chart

**Purpose:** Show the proportion of purchase amounts across different regions.

* Select the data range H1:H51 and F1:F51.
* Go to the Insert tab.
* In the Charts group, click Insert Pie or Doughnut Chart.
* Select Doughnut.
* Right-click on the chart and choose Select Data.
* Click Add under Legend Entries (Series).
* For Series name, select SalesAmount.
* For Series values, select the range F2:F51.
* Click OK.
* Click Edit under Horizontal (Category) Axis Labels.
* Select the range H2:H51.
* Click OK.

## 5. Scatter Plot

**Purpose:** Show the relationship between purchase amount and quantity sold.

* Select the data range F1:G51.
* Go to the Insert tab.
* In the Charts group, click Insert Scatter (X, Y) or Bubble Chart.
* Select Scatter.
* Right-click on the chart and choose Select Data.
* Click Add under Legend Entries (Series).
* For Series X values, select the range G2:G51.
* For Series Y values, select the range F2:F51.
* Click OK.

## 6. Histogram

**Purpose:** Show the frequency distribution of customer ratings.

* Select the data range G1:G51.
* Go to the Insert tab.
* In the Charts group, click Insert Statistic Chart.
* Select Histogram.
* Right-click on the chart and choose Format Axis.
* Adjust the bin width or number of bins as necessary.

## 7. Box and Whisker Plot

**Purpose:** Show the distribution of purchase amounts.

* Select the data range F1:F51.
* Go to the Insert tab.
* In the Charts group, click Insert Statistic Chart.
* Select Box and Whisker.

## 8. Heat Map

**Purpose:** Show the intensity of purchase amounts across different regions and products.

* Select the data range A1:F51.
* Go to the Home tab.
* In the Styles group, click Conditional Formatting.
* Select Colour Scales.
* Choose the desired colour scale.

## 9. Map Chart

**Purpose:** Visualize the distribution of sales amounts across different regions.

* Ensure your data range includes the Region and SalesAmount columns (e.g., H1:H51 and F1:F51).
* Select the data range H1:H51 and F1:F51.
* Go to the Insert tab.
* In the Charts group, click Insert Map Chart.
* Select Filled Map.
* Excel will automatically create a map chart based on the region names. If prompted, confirm the geographical regions.