**1. Conditional / Column Formatting**

* *“Highlight all rows where species is Adelie.”*
* *“Add data bars to the bill\_length\_mm column.”*
* *“Color the island column with a different color for each unique island.”*
* *“Highlight cells in the sex column that are blank or missing.”*

**2. Calculated Columns**

* *“Add a calculated column called bill\_area as bill\_length\_mm × bill\_depth\_mm.”*
* *“Create a new column body\_mass\_kg by dividing body\_mass\_g by 1000.”*
* *“Add a new column called SizeCategory that classifies penguins as ‘Light’, ‘Medium’, or ‘Heavy’ based on body\_mass\_g.”*

**3. PivotTables & Charts**

* *“Insert a PivotTable showing average body\_mass\_g by species.”*
* *“Create a PivotChart comparing body mass by species and sex.”*
* *“Build a PivotTable showing average flipper\_length\_mm by island, then make a bar chart from it.”*
* *“Make a line chart showing the average bill\_length\_mm by year for each species.”*

**4. Advanced Analysis with Python**

* *“Use Python to create a scatter plot of bill\_length\_mm vs bill\_depth\_mm colored by species.”*
* *“Run a correlation analysis between body\_mass\_g, flipper\_length\_mm, and bill\_length\_mm.”*
* *“Cluster the penguins into 3 groups based on their numeric measurements and show the results in a plot.”*
* *“Fit a simple linear regression to predict body\_mass\_g from bill\_length\_mm and flipper\_length\_mm.”*