**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.”*

**BONUS! Agent Mode**

* *“Build a loan calculator that lets me input loan amount, annual interest rate, and term in years. Show the monthly payment, create an amortization table with month, payment, principal, interest, and ending balance. Format it cleanly.”*
* *“Take this table of budgeted and actual expenses by department. Build a report showing variances in dollars and percentages, highlight any variances greater than 10 percent, and create a summary dashboard with charts for executives.”*
* *“Using this trial balance data for September and August, prepare a financial close pack. Create P&L and Balance Sheet views with standard formatting, highlight account variances greater than 5 percent month over month, and produce a summary tab with KPIs and trend charts.”*