C   Evaluation Questions

C.1   Visual Quality Questions

1. Is the x-axis correctly assigned and labeled?

2. Is the y-axis correctly assigned and labeled?

3. Are the axis labels clear and readable?

4. Are the colors appropriately used to distinguish between different objects?

5. Are accurate legends included if necessary?

6. Is there an appropriate aspect ratio and scaling to avoid misleading information?

7. Are the marks (data points, bars, lines, etc.) displayed in a way that correctly represents the values?

8. Is there a correct data-ink ratio to aid readability?

C.2   Code Quality Questions

1. Does the code correctly import and use the necessary libraries for graph generation?

2. Does the code execute without syntax errors and successfully generate a graph?

3. Does the code correctly reference the column names in the dataset?

4. Does the code correctly filter the dataset based on the user's specified conditions (e.g., location and year)?

5. Does the code avoid hardcoding data or column names and instead handle them dynamically?

6. Does the generated code cover all aspects of the user prompt?

7. Does the code avoid redundant or unnecessary computations?

C.3   Data Accuracy Questions

1. Is the selected graph appropriate for the prompt and dataset?

2. Does the code select the correct columns relevant to the user prompt?

3. Does the filtering process correctly reflect the user's intent?

4. Are the correct aggregation operations (e.g., sum, average, median) applied where necessary?

5. Does the generated graph represent the correct subset of data requested?

6. Does the code correctly handle missing or null values in the selected column(s)?

7. Does the selected data cover all relevant aspects of the user prompt?