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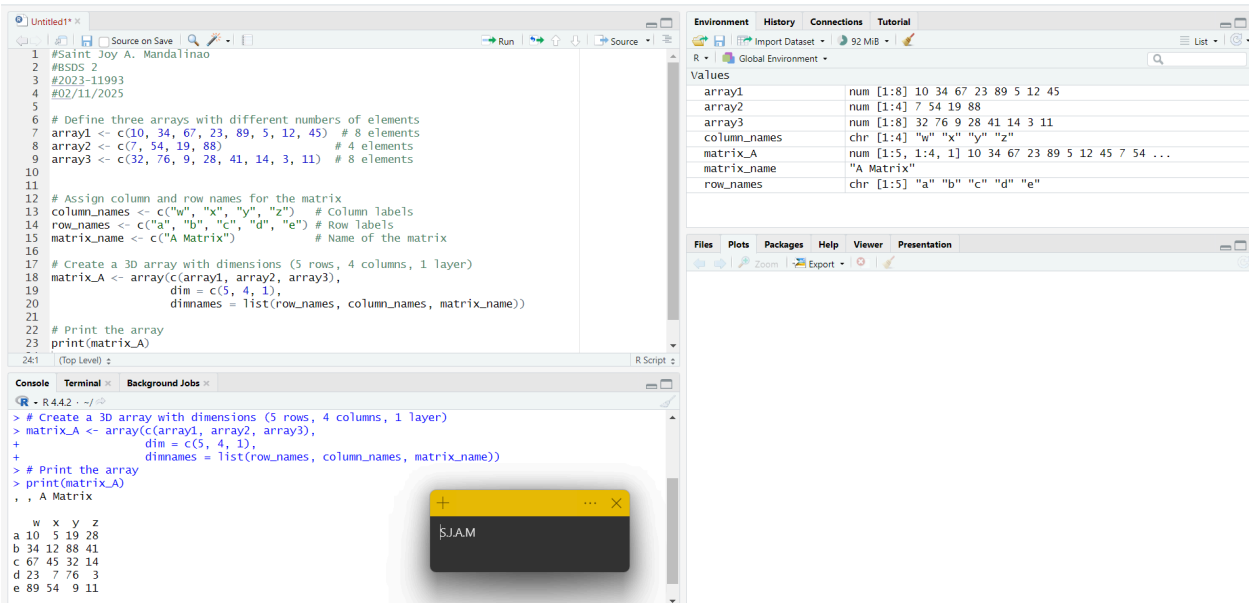
2023-11993
2/11/2025

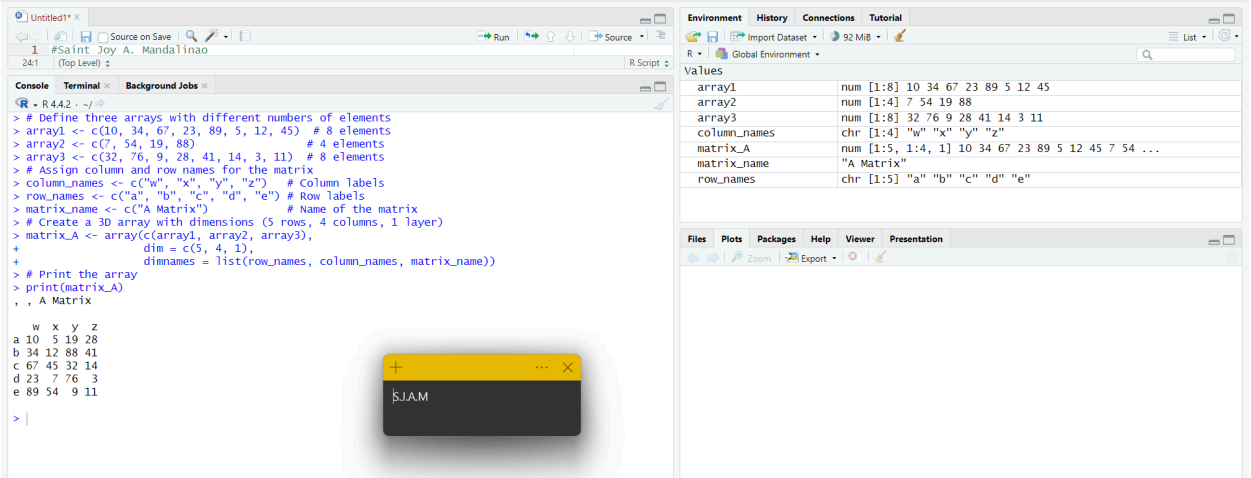
Exercise 1 (Data Organization and Visualizations in R)

Exercise 1a. Write a code to create a matrix similar to the one shown below, using three original arrays: array1, array2, and array3. The rst array contains 8 elements, and the second contains 4 elements. Ensure the matrix follows the given row and column variables and name it "A Matrix".

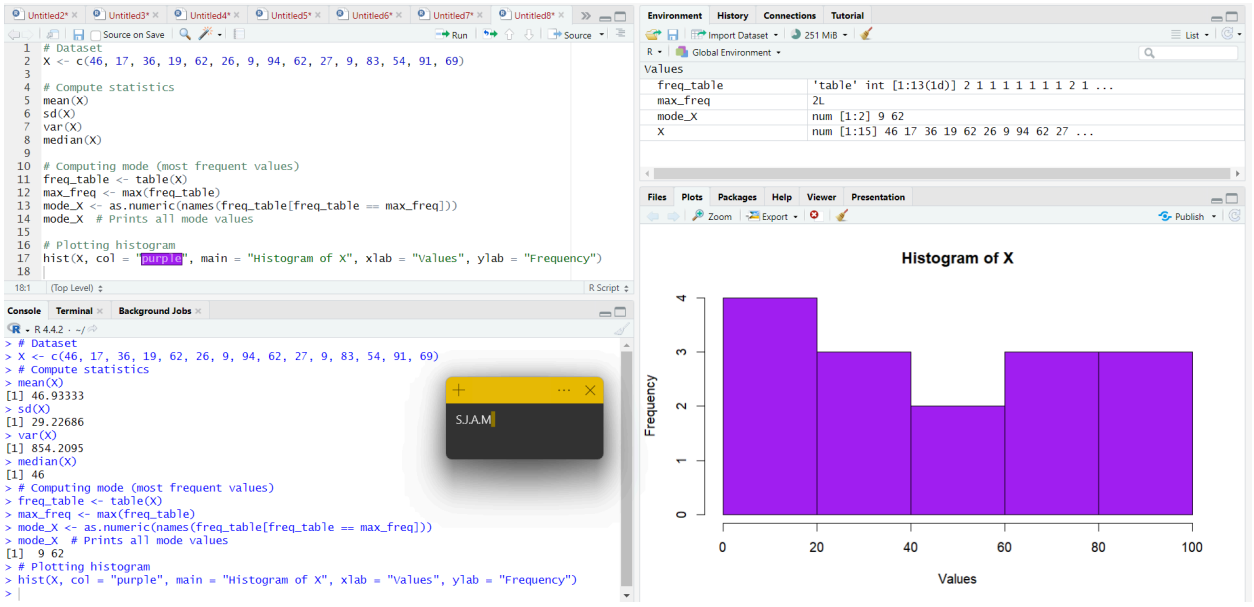
Code



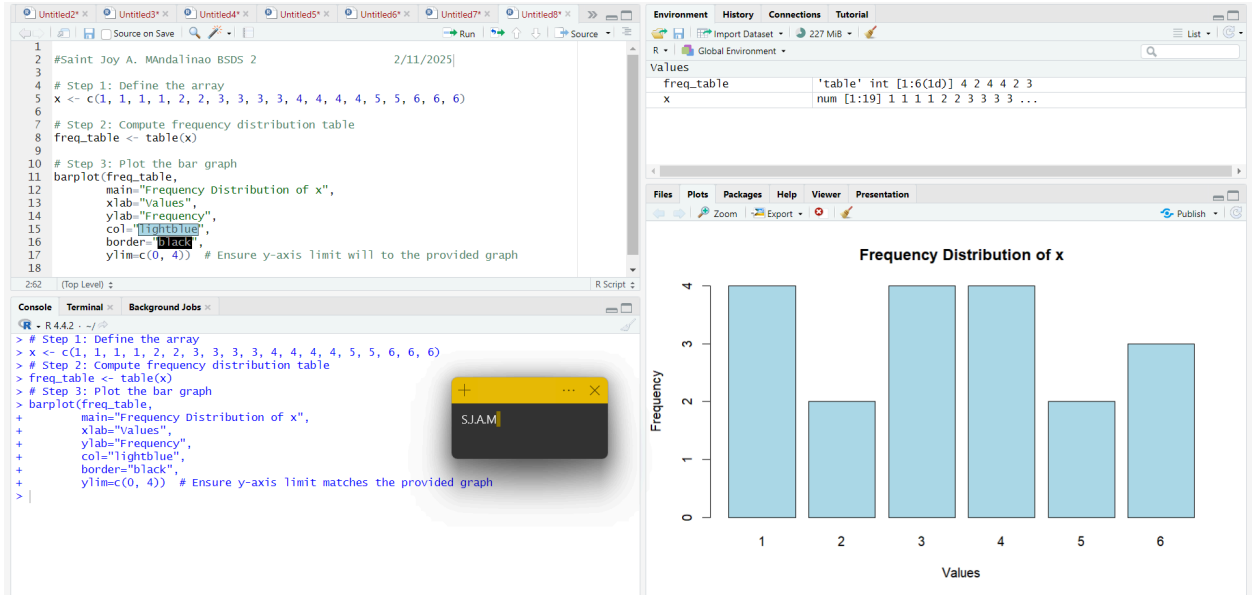
Console and Environment



Exercise 1b Write a code to compute the mean, median, mode, variance, and standard deviation of the following dataset. X = {46, 17, 36, 19, 62, 26, 9, 94, 62, 27, 9, 83, 54, 91, 69}

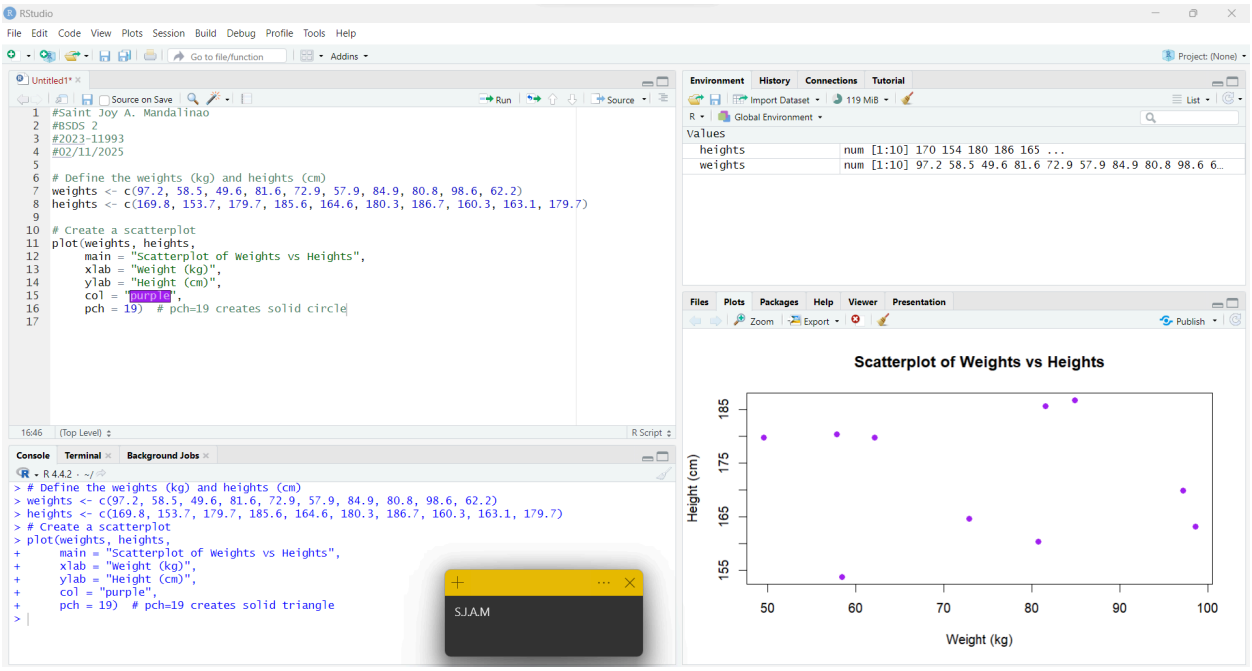


Exercise 1c Write a code to implement the frequency distribution bar graph below.



Exercise 1d Generate a scatterplot using the data provided below:

- Weights (kg): 97.2, 58.5, 49.6, 81.6, 72.9, 57.9, 84.9, 80.8, 98.6, 62.2
- Heights (cm): 169.8, 153.7, 179.7, 185.6, 164.6, 180.3, 186.7, 160.3, 163.1, 179.7



Exercise 1e. Write a code to plot a time series for the monthly average sales of a restaurant for the year 2024. Feel free to generate random sales values.