

LAB 3

Basic MATLAB Commands

MATLAB provides several functions for plotting and visualizing data. Here are some commonly used plotting functions and their features:

- `plot(x, y, 'color')`: This function plots the data in vectors `x` and `y` with the specified color. For example, `plot(x, y, 'r')` plots the data with a red color. Other color options include `b` (blue), `g` (green), `k` (black), `m` (magenta), `c` (cyan), and `y` (yellow).
- `stem(x, y, 'color')`: This function plots discrete data as vertical lines at each point with the specified color. For example, `stem(x, y, 'r')` plots the data with a red color.
- `subplot(m, n, p)`: This function divides the figure window into an `m`-by-`n` grid of subplots and activates the `p`-th subplot for plotting. For example, `subplot(2, 2, 1)` creates a 2-by-2 grid of subplots and activates the top-left subplot for plotting.
- `hold on`: This function allows multiple plots to be displayed in the same figure window. Subsequent plots will be added to the same figure instead of replacing the previous plot.