Drawing Arrows Using Quiver

In this project, I explored MATLAB's `quiver` function to draw arrows with specific start and end points. This method is particularly effective for visualizing vector directions and magnitudes in a 2D space.

I began by defining the starting and ending coordinates for two arrows. For each arrow, I calculated the directional components by subtracting the starting coordinates from the ending ones. Using the `quiver` function, I plotted the arrows, specifying the starting points and directional components. To distinguish the arrows visually, I chose blue for the first arrow and red for the second.

To ensure the arrows fit well within the plot, I adjusted the x and y limits and added a grid for better visual alignment. The result was a clean and precise representation of the arrows, clearly showing their directions and relative positions.

```
% Drawing Arrows Using Quiver
% I want to draw arrows with specific start and end points.

% Define the start and end points for two arrows
x1 = [10, 30]; y1 = [10, 30]; % Arrow 1
x2 = [25, 15]; y2 = [15, 25]; % Arrow 2

% Plot the arrows
figure;
quiver(x1(1), y1(1), x1(2) - x1(1), y1(2) - y1(1), 0, 'b', 'LineWidth', 2); % First arrow
hold on;
quiver(x2(1), y2(1), x2(2) - x2(1), y2(2) - y2(1), 0, 'r', 'LineWidth', 2); % Second arrow
xlim([0, 40]);
ylim([0, 40]);
grid on;
title('Arrows Using Quiver');
```