Algorithm for Line Drawing (DDA Algorithm)

Step 1:
Input the starting and ending points:
(x_1, y_1) and (x_2, y_2).

Step 2:
Calculate the differences:
$\Delta x = x_2 - x_1$, $\Delta y = y_2 - y_1$

Step 3:
Determine the number of steps:
Steps = max(|Δx|, |Δy|)

Step 4:
Find how much to move in x and y for each step:
x_increment = Δx / Steps, y_increment = Δy / Steps

Step 5:
Initialize the starting point:
$x = x_1$, $y = y_1$

Step 6:
Iterate through the steps:
1. Plot the point (x, y).
2. Update the point:
   x = x + x_increment, y = y + y_increment

Step 7:
Stop when all steps are completed.