DDA LINE ALGORITHM

**DDA Line (X₁, Y₁, Xₙ, Yₙ):**

**Description:** Here X₁ and Y₁ denote the starting x – coordinate and y – coordinate of the line and Xₙ and Yₙ denote the ending x – coordinate and y – coordinate.

1. Set \( M = \frac{(Y_N - Y_1)}{(X_N - X_1)} \) \[Calculate slope of line\]
2. Repeat For I = X₁ to Xₙ
3.  If \((M <= 1)\) Then
4.      Set \( D_X = 1 \)
5.      Set \( D_Y = M \ast D_X \)
6.  Else
7.      Set \( D_Y = 1 \)
8.      Set \( D_X = D_Y / M \)
   \[End of If\]
9.  Set \( X_1 = X_1 + D_X \)
10. Set \( Y_1 = Y_1 + D_Y \)
11. Call PutPixel(\(X_1, Y_1\))
   \[End of For\]
12. Exit