

DDA LINE ALGORITHM

DDA Line (X_1, Y_1, X_N, Y_N):

Description: Here X_1 and Y_1 denote the starting x - coordinate and y - coordinate of the line and X_N and Y_N denote the ending x - coordinate and y - coordinate.

1. Set $M = (Y_N - Y_1) / (X_N - X_1)$ [Calculate slope of line]
2. Repeat For $I = X_1$ to X_N
3. If ($M \leq 1$) Then
4. Set $D_X = 1$
5. Set $D_Y = M * D_X$
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