

Expt 2 : Line drawing using DDA algorithm Date: ??

Aim: To draw a line using DDA algorithm.

Theory: DDA Algorithm is the simplest line drawing algorithm. DDA stands for Digital Differential Analyzer. It is an incremental method of scan conversion of line. In this method calculation is performed at each step by using results of previous steps.

Suppose at step i, the pixels is (x_i, y_i)

The line of equation for step i is : $y_i = mx_i + b$

Where m is the slope of the line and b is the y-intercept of the line.

Given the starting and ending coordinates of a line, DDA Algorithm attempts to generate the points between the starting and ending coordinates.

Procedure:

Algorithm

Write Algorithm Steps

Source Code

Write C program Implemented by U

Output

Show all the cases of line with $m < 1$, $m > 1$ and $m = 1$

Draw diagram on unruled page with intermediate points in a table.

Conclusion : ???