

Now,

```
void MidPointLine (int x0, int x1, int y0, int y1, int color)
{
    int dx = x1 - x0, dy = y1 - y0;
    int dinit = 2 * dy + dx;
    int dE = 2 * dy;
    int dSE = 2 * dy + 2 * dx;
    int x = x0, y = y0;
    WritePixel (x, y, color);
    while (x < x1) {
        if (dinit >= 0) {
            dinit = dinit + dE;
            x++;
        }
        else {
            dinit = dinit + dSE;
            x++;
            y++;
        }
        WritePixel (x, y, color);
    }
}
```