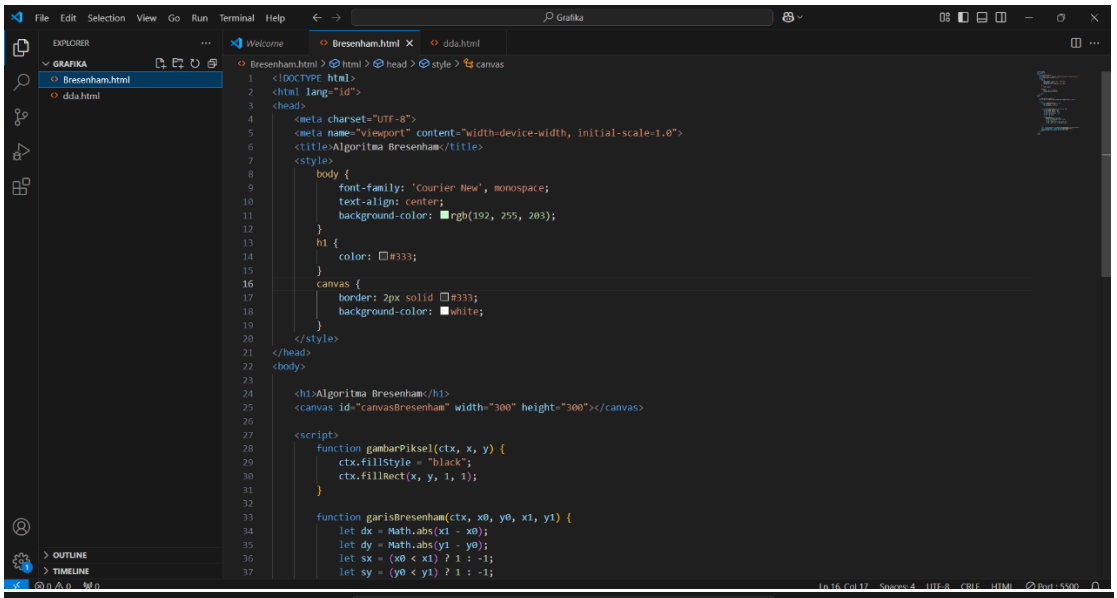
Nama : Meita Ayu Sabna Damaynti

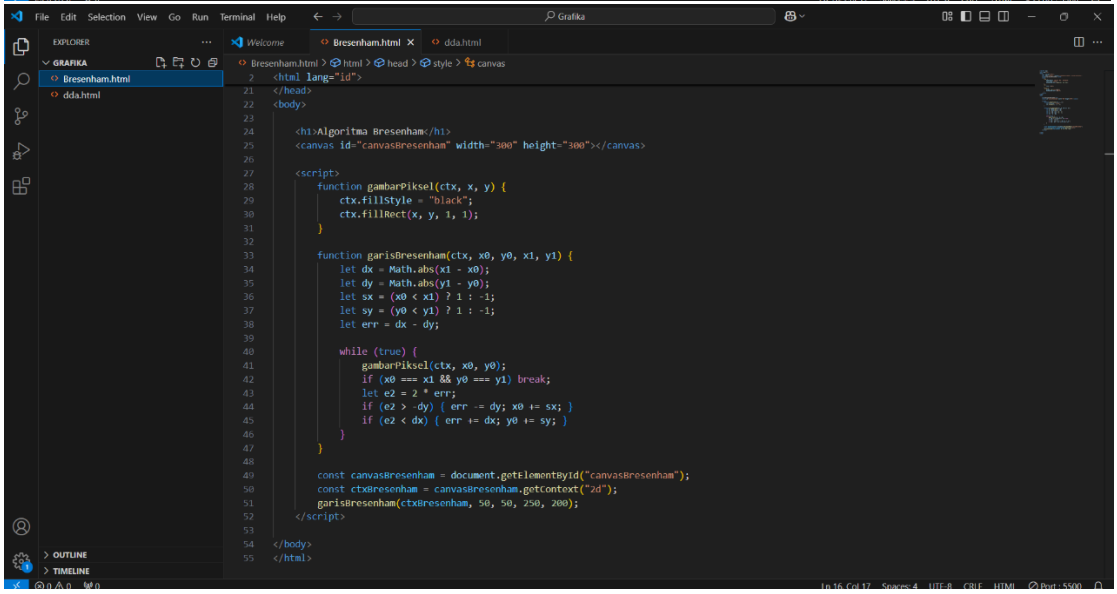
Npm : 2257051014

Kelas : CD

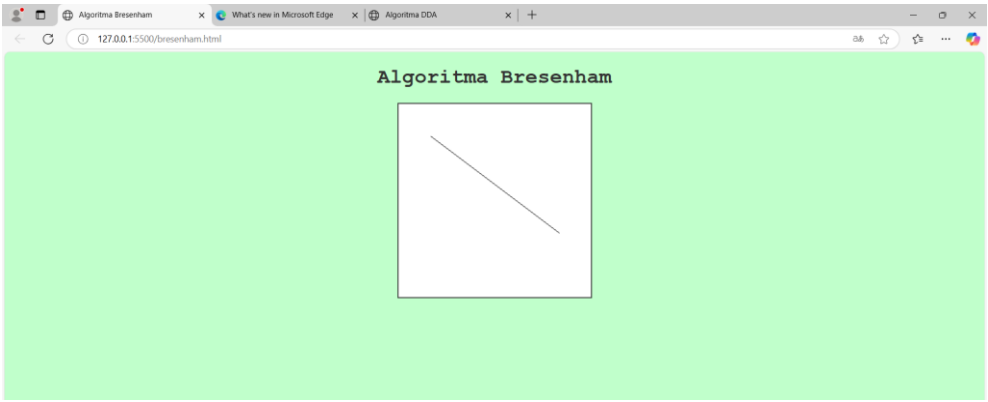
Tugas Pembentukan Garis Menggunakan Algoritma Bresenham dan DDA

1. Menggunakan Algoritma Bresenham

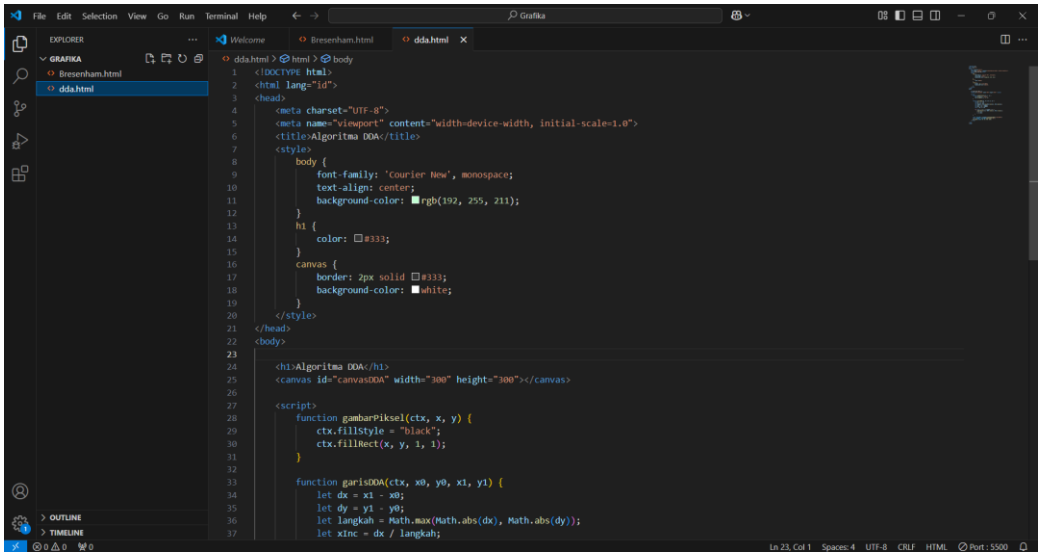




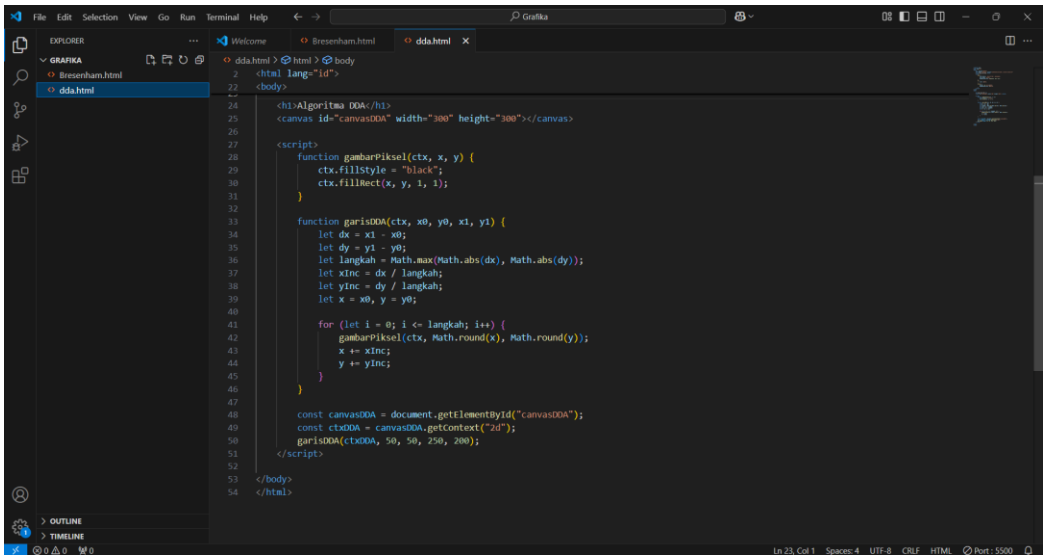
- Hasilnya :



2. Menggunakan Algoritma DDA

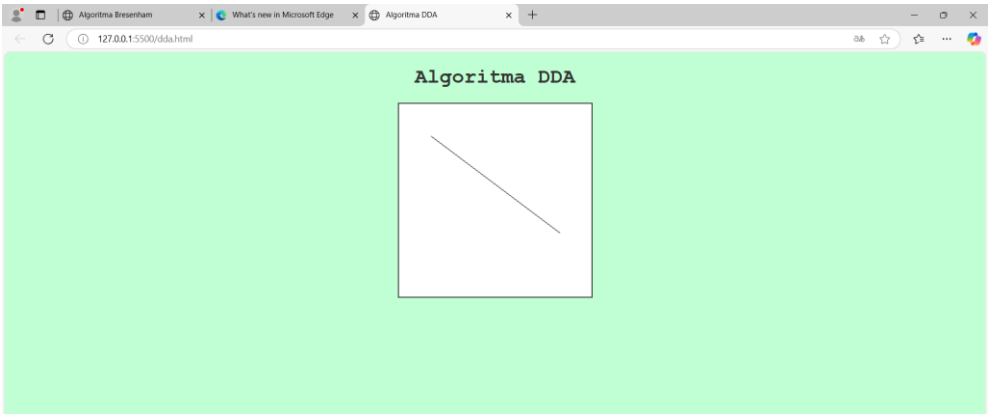


```
<!DOCTYPE html>
<html lang="id">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Algoritma DDA</title>
    <style>
        body {
            font-family: 'Courier New', monospace;
            text-align: center;
            background-color: rgb(192, 255, 211);
        }
        h1 {
            color: #333;
        }
        canvas {
            border: 2px solid #333;
            background-color: white;
        }
    </style>
</head>
<body>

    <h1>Algoritma DDA</h1>
    <canvas id="canvasDDA" width="300" height="300"></canvas>

    <script>
        function gambarPiksel(ctx, x, y) {
            ctx.fillStyle = "black";
            ctx.fillRect(x, y, 1, 1);
        }

        function garisDDA(ctx, x0, y0, x1, y1) {
            let dx = x1 - x0;
            let dy = y1 - y0;
            let langkah = Math.max(Math.abs(dx), Math.abs(dy));
            let xInc = dx / langkah;
```



```
<html lang="id">
<body>
    <h1>Algoritma DDA</h1>
    <canvas id="canvasDDA" width="300" height="300"></canvas>

    <script>
        function gambarPiksel(ctx, x, y) {
            ctx.fillStyle = "black";
            ctx.fillRect(x, y, 1, 1);
        }

        function garisDDA(ctx, x0, y0, x1, y1) {
            let dx = x1 - x0;
            let dy = y1 - y0;
            let langkah = Math.max(Math.abs(dx), Math.abs(dy));
            let xInc = dx / langkah;
            let yInc = dy / langkah;
            let x = x0, y = y0;

            for (let i = 0; i <= langkah; i++) {
                gambarPiksel(ctx, Math.round(x), Math.round(y));
                x += xInc;
                y += yInc;
            }
        }

        const canvasDDA = document.getElementById("canvasDDA");
        const ctxDDA = canvasDDA.getContext("2d");
        garisDDA(ctxDDA, 50, 50, 250, 200);
    </script>

</body>
</html>
```

- Hasilnya :


Algoritma Bresenham
What's new in Microsoft Edge
Algoritma DDA
127.0.0.1:5500/dda.html
Algoritma DDA