

CSE423 Summer 2023

Assignment 1

Total: 10 marks

Deadline: 06/07/2023

Submission Link: <https://forms.gle/idX3HpmNyCwzL2Ho6>

1. Using DDA Algorithm find out the pixels of the lines whose endpoints are given as
 - i) (1,-4) to (5,6)
 - ii) (10,9) to (2, 5)
2. Write down the functions/methods for zone finding, converting to zone-0 and converting to the original zone.
3. Using the midpoint line algorithm, find out the pixels of the lines whose endpoints are given as (3,10) and (10,15)
4. Suppose, the starting point of a line is (a, b). While drawing the line using the DDA Algorithm, Slope of the line was 2.6. If x has been increased 4 times. What will be the endpoint of the line?
5. Suppose, the starting point of a line is (a, b). While drawing the line using the Midpoint Line drawing algorithm, the East pixel has been chosen 4 times and the North-East pixel has been chosen 13 times. What will be the endpoint of the line?
6. Using Midpoint Line Drawing Algorithm find out the pixels of the lines whose endpoints are given as (1,-4) to (-5,-9).
7.
 - i) Find out the first 5 pixels to draw the circle of radius 10 and centered at (-7, -12).
 - ii) What will be the pixel-values in zone 6?