Assignment: 1 (Unit One) **Scan Conversion Algorithm**

DDA= Digital Differential Analyzer

BLA = Bresenham's Line Algorithm

1. Digitize the line A(1,1) and B(5,6) using BLA.

2. Digitize the line A(7,8) and B(1,4) using BLA.

3. Digitize the line A(1,1) and B(5,6) using DDA.

4. Digitize the line A(5,2) and B(7,8) using BLA.

5. Digitize the line A(0,0) and B(10,10) using BLA.

6. Digitize the line A(1,3) and B(10,10) using BLA and DDA.

7. Draw a line with two end point P(5,3) and Q(1,2) using DDA

8. Digitize the line with endpoints A(1,7) and B(6,3) using digital differential analyzer line drawing algorithm. Show all necessary steps.

9. Digitize the line with end points (1,2) and (5,6) using digital differential analyzer method.

10. Digitize the line A(2,8) and B(10,5) using BLA.

11. Digitize a circle with radius 9 and center at (6,7) using mid-point circle drawing algorithm.

12. Digitize a circle with centre (2,3) and radius 5 using mid-point circle drawing algorithm.

13. Digitize an ellipse with centre (2,3) and $r_x = 8$ and $r_y = 6$ using ellipse drawing algorithm.

Deadline:2nd September 2022

Note: Students must have to submit assignment report within the deadline. Report submitted after deadline is not entertained.