Assignment 1

Statement:

Write the pseudo-code for the Bresenham Circle algorithm.

Solution:

1. Include the graphics header file and obtain graphics mode and driver.
2. Get the center point (x,y) and radius(r) of a circle.
3. Initialize the variables

i. a=0;b=r;d=3-(2*r);

4. If(d>=0) then

i. b--;

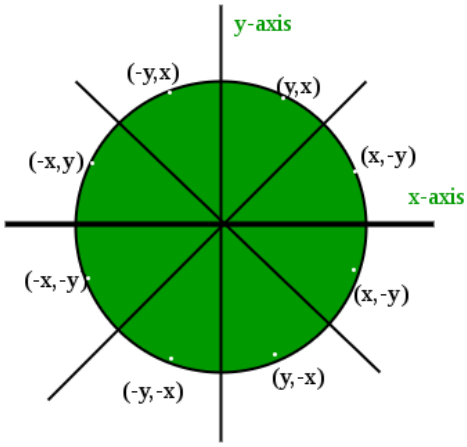
ii. d=d+10+4*(a-b);

b. else

i. d=d+(4*a)+6

5. Repeat step 4 until a<=b and Increment a by 1 each time.
6. Plot the pixel to display the circle using put pixel function.
7. Display the circle. BRESENHAM'S CIRCLE DRAWING ALGORITHM

Source Code Programming Bresenham's Algorithm



For a pixel (x,y) all possible pixels in 8 octants.