**Practical-11**

Computer Graphics and Multimedia

1. Write a program to draw a circle using bresenham’s algorithm.

#include <stdio.h>

#include <dos.h>

#include <graphics.h>

void drawCircle(int xc, int yc, int x, int y)

{

putpixel(xc+x, yc+y, RED);

putpixel(xc-x, yc+y, RED);

putpixel(xc+x, yc-y, RED);

putpixel(xc-x, yc-y, RED);

putpixel(xc+y, yc+x, RED);

putpixel(xc-y, yc+x, RED);

putpixel(xc+y, yc-x, RED);

putpixel(xc-y, yc-x, RED);

}

void circleBres(int xc, int yc, int r)

{

int x = 0, y = r;

int d = 3 - 2 \* r;

drawCircle(xc, yc, x, y);

while (y >= x)

{

x++;

if (d > 0)

{

y--;

d = d + 4 \* (x - y) + 10;

}

else

d = d + 4 \* x + 6;

drawCircle(xc, yc, x, y);

delay(50);

}

}

int main()

{

int xc = 200, yc = 200, r = 100;

int gd = DETECT, gm;

initgraph(&gd, &gm, "c:\\tc\\bgi");

circleBres(xc, yc, r);

return 0;

}

