**Assignment number:5**

**Subject: COMPUTER GRAPHICS LAB**

Name: ***RIA MITTAL***

Class: ***SECOND YEAR ENGINEERING***

Division: ***B***

Roll no: ***222008***

Batch: ***B1***

**PROBLEM STATEMENT:**

Write C++/Java program to draw circle using Bresenham‘s algorithm.

**Code:**

package bresenhem;

import java.awt.\*;

import javax.swing.\*;

public class Bresenhem extends JFrame {

public void bresen(Graphics g,int xc,int yc,int r)

{

int x=0;

int y=r;

int p=3-2\*r;

do

{

if(p<0)

p=p+4\*x+6;

else

{

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

y=y-1;

}

x=x+1;

g.drawLine(xc+x, yc+y,xc+x,yc+y);

g.drawLine(x+xc,yc-y,xc+x,yc-y);

g.drawLine(xc-x,yc+y,xc-x,yc+y);

g.drawLine(xc-x,yc-y,xc-x,yc-y);

g.drawLine(xc+y,yc+x,xc+y,yc+x);

g.drawLine(xc+y,yc-x,xc+y,yc-x);

g.drawLine(xc-y, yc+x,xc-y,yc+x);

g.drawLine(xc-y, yc-x,xc-y,yc-x);

}while(x<y);

}

public void paint(Graphics g)

{

bresen(g,450,450,110);

}

public static void main(String[] args) {

// TODO code application logic here

Bresenhem a = new Bresenhem();

a.setSize(1024,768);

a.setVisible(true);

a.setDefaultCloseOperation(EXIT\_ON\_CLOSE);

}

}

**Output:**

