**EXPERIMENT NO. 8**

**AIM-** To draw a circle with a given centre and radius using midpoint circle algorithm.

**Source Code:**

#include<conio.h>7

#include<iostream.h>

#include<dos.h>

#include<graphics.h>

void main()

{

intgd=DETECT,gm;

inti,r,x,y,xc,yc;

float d;

initgraph(&gd,&gm,"C:\\turboc3\\bgi");

cout<<"Enter Radius\n";

cin>>r;

cout<<"Enter Center of circle\n";

cin>>xc;

cin>>yc;

d=1.25-r;

x=0;

y=r;

do

{

if(d<0)

{

x=x+1;

d=d+2\*x+1;

}

else

{

x=x+1;

y=y-1;

d=d+2\*x-2\*y+10;

}

putpixel(xc+x,yc+y,5);

putpixel(xc-y,yc-x,5);

putpixel(xc+y,yc-x,6);

putpixel(xc-y,yc+x,6);

putpixel(xc+y,yc+x,2);

putpixel(xc-x,yc-y,3);

putpixel(xc+x,yc-y,4);

putpixel(xc-x,yc+y,4);

delay(100);

}

while(x<y);

getch();

closegraph();

}

**OUTPUT:-**

