```
#include <graphics.h>
#include <stdlib.h>
#include <math.h>
#include <stdio.h>
#include <conio.h>
#include <iostream.h>

class bresen
{
    float x, y,a, b, r, p;
    public:
    void get ();
    void cal ();
};
    void main ()
    {
    bresen b;
    b.get ();
    b.cal ();
    getch ();
   }
    Void bresen :: get ()
   {
    cout<<"ENTER CENTER AND RADIUS";
     cout<< "ENTER (a, b)";
    cin>>a>>b;
    cout<<"ENTER r";
    cin>>r;
}
void bresen ::cal ()
{
    /* request auto detection */
    int gdriver = DETECT,gmode, errorcode;
    int midx, midy, i;
    /* initialize graphics and local variables */
    initgraph (&gdriver, &gmode, " ");
    /* read result of initialization */
    errorcode = graphresult ();
    if (errorcode ! = grOK)    /*an error occurred */
    {
        printf("Graphics error: %s \n", grapherrormsg (errorcode);
        printf ("Press any key to halt:");
        getch ();
```

```
        exit (1); /* terminate with an error code */
    }
    x=0;
    y=r;
    putpixel (a, b+r, RED);
    putpixel (a, b-r, RED);
    putpixel (a-r, b, RED);
    putpixel (a+r, b, RED);
    p=5/4)-r;
    while (x<=y)
    {
        If (p<0)
        p+= (4*x)+6;
        else
        {
            p+=(2*(x-y))+5;
            y--;
        }
        x++;
        putpixel (a+x, b+y, RED);
        putpixel (a-x, b+y, RED);
        putpixel (a+x, b-y, RED);
        putpixel (a+x, b-y, RED);
        putpixel (a+x, b+y, RED);
        putpixel (a+x, b-y, RED);
        putpixel (a-x, b+y, RED);
        putpixel (a-x, b-y, RED);
    }
}
```