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

int main(void){

   int gd = DETECT, gm;
   float xk, yk, xc, yc, rx, ry, pk;
   initgraph(&gd, &gm, "C:\\TURBOC3\\BGI");

   printf("Enter center of the ellipse x, y");
   scanf("%f %f", &xc, &yc);

   printf("Enter major radius and minor radius");
   scanf("%f %f", &rx, &ry);

   xk = 0;
   yk = ry;

   pk = ry * ry - rx * rx * ry + rx * rx / 4;

   while(2 * ry * ry * xk < 2 * rx * rx * yk){

   xk++;
   if(pk < 0){
   pk += 2 * ry * ry * xk + ry * ry;
   }
```

```
else{

   yk--;
   pk += 2 * ry * ry * xk - 2 * rx * rx * yk + ry * ry;
   }
   putpixel(xk + xc, yk + yc, 7);
   putpixel(-xk + xc, yk + yc, 7);
   putpixel(-xk + xc, -yk + yc, 7);
   putpixel(xk + xc, -yk + yc, 7);
   }

   pk = ry * ry * (xk + 0.5) * (xk + 0.5) + rx * rx * (yk - 1) * (yk - 1) - rx * rx * ry * ry;

   while(yk > 0){

   yk--;
   if(pk > 0)
   pk -= 2 * rx * rx * yk + rx * rx;
   else{
   xk++;
   pk += 2 * ry * ry * xk - 2 * rx * rx * yk + rx * rx;
   }
```

```
putpixel(xk + xc, yk + yc, 7);
            putpixel(-xk + xc, yk + yc, 7);
            putpixel(-xk + xc, -yk + yc, 7);
            putpixel(xk + xc, -yk + yc, 7);

      }
      getch();
      closegraph();
      return 0;
}
```