

```
/* Same with frac.rr */
import("glib3.rr")$ 
extern CX$ 
extern CY$ 
def lineto(T,R) { 
    extern CX; 
    extern CY; 
    X=deval(CX + R*cos(T)); 
    Y=deval(CY + R*sin(T)); 
    glib_line(CX,CY,X,Y); 
    CX=X; CY=Y; 
} 
def moveto(X,Y) { 
    extern CX; 
    extern CY; 
    CX=X; CY=Y; 
} 
def ccurve2(T,R,N) { 
    print([T,R,N]); 
    if (N<2) { 
        lineto(T,R); return(0); 
    } 
    ccurve2(T+@pi/4,R/2^(1/2),N-1); 
    ccurve2(T-@pi/4,R/2^(1/2),N-1); 
} 
def main(N) { 
    glib_window(-10,-10,15,15); 
    glib_clear(); 
    moveto(0,0); 
    ccurve2(0,10,N); 
    glib_flush(); 
} 
end$ 

/*
glib_clear(); 
glib_window(-1,-1,10,10); 
moveto(0,0); glib_flush(); 
lineto(@pi/4,5); glib_flush(); 
lineto(0,3); glib_flush(); 
main(2); 
main(3); 
main(4); 
main(5); 
main(10); 
*/

```

```
/*
cc ccurve-r.c glib4.c -lx11 -lm 
*/
#include <stdio.h> 
#include <math.h> 
#include "glib4.h" 
double CX; 
double CY; 
void mylineto(double T,double R) { 
    extern double CX; 
    extern double CY; 
    double X,Y; 
    X=CX + R*cos(T); 
    Y=CY + R*sin(T); 
    glib_color(NULL,0xff0000); 
    glib_line(CX,CY,X,Y); 
    CX=X; CY=Y; 
} 
void mymoveto(double X,double Y) { 
    extern double CX; 
    extern double CY; 
    CX=X; CY=Y; 
} 
void ccurve2(double T,double R,int N) { 
    if (N<2) { 
        mylineto(T,R); return; 
    } 
    ccurve2(T+M_PI/4,R/sqrt(2),N-1); 
    ccurve2(T-M_PI/4,R/sqrt(2),N-1); 
} 
int main() { 
    glib_open(); 
    glib_window(-10,-10,20,15); 
    glib_loop(); 
} 
void glib_draw() { 
    int n; 
    n=8; 
    /* n=20; */ 
    glib_clear(); 
    mymoveto(0,0); 
    ccurve2(0,10,n); 
    glib_flush(); 
} 

/*
glib_clear(); 
glib_window(-1,-1,10,10); 
moveto(0,0); glib_flush(); 
lineto(@pi/4,5); glib_flush(); 
lineto(0,3); glib_flush(); 
main(2); 
main(3); 
main(4); 
main(5); 
main(10); 
*/

```