

```

#include <stdio.h>
#include <graphics.h>
#include <math.h>

int x[4]={200,100,200,250};
int y[4]={200,150,75,100};

void bezier ()
{
    int i;
    double t,xt,yt;
    for (t = 0.0; t < 1.0; t += 0.0005)
    {
        xt =
        pow(1-t,3)*x[0]+3*t*pow(1-t,2)*x[1]+3*pow(t,2)*(1-t)*x[2]
        ]+pow(t,3)*x[3];
        yt =
        pow(1-t,3)*y[0]+3*t*pow(1-t,2)*y[1]+3*pow(t,2)*(1-t)*y[2]
        ]+pow(t,3)*y[3];
        putpixel (xt, yt,WHITE);
    }

    for (i=0; i<4; i++)
        putpixel (x[i], y[i], YELLOW);
    getch();
    closegraph();
}

void main()
{
    int gd = DETECT, gm;
    initgraph (&gd, &gm, "..\\bgi");
    bezier ();
}

```

