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Write a program to draw Two dimensional Bezier curve.

#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 ();

}

