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

void bspline(int, int, int, int, int, int, int, int, int, int);

void bspline(int x0,int y0,int x1,int y1,int x2,int y2,int x3,int y3,int k,int count)
{
    int i, j, n=4;
    float t, tinc, ts, dlt, dlts, c0, c1, c2, c3,tc;
    float cx[25], cy[25];
    t = 0.0; tinc =0.25;
    for(i=0; i <= n; ++i)
    {
        ts = t*t;
        tc=ts*t;
        dlt = 1.0 - t;
        dlts = dlt*dlt;
        c0 = dlts*dlt/6.0;
        c1 = tc/2-ts+.66;
        c2 = -tc/2.0+ts/2.0+t/2.0+.167;
        c3 = tc/6.0;
        cx[i] = c0*x0 + c1*x1 + c2*x2 + c3*x3;
        cy[i] = c0*y0 + c1*y1 + c2*y2 + c3*y3;
        t = t + tinc;
    }

    setcolor(12);
    circle(x0,y0,3);
    circle(x1,y1,3);
    circle(x2,y2,3);
    circle(x3,y3,3);

    setcolor(14);
    line(x0,y0, x1,y1);
    line(x1,y1, x2,y2);
    line(x2,y2, x3,y3);

    setcolor(k);
    for(i=0; i < n; ++i)
    {
        line(cx[i],cy[i],cx[i+1],cy[i+1]);
        delay(200);
    }
    if(count!=4)
    {
        setcolor(7);
        circle(cx[i],cy[i],3);
    }
    return;
}

int main()
{
    int x0=150, y0=100, x1=200, y1=200, x2=400, y2=300, x3=480, y3=170;
    int x4=300, y4=120, x5=400, y5=50, x6=600, y6=120, x7=480, y7=180, k, count=0;

    initwindow(700,400);

    k=11;
    count++;
    bspline(x0,y0,x1,y1,x2,y2,x3,y3,k,count);

    k=12;
    count++;
    bspline(x1,y1,x2,y2,x3,y3,x4,y4,k,count);

    k=13;
    count++;
    bspline(x2,y2,x3,y3,x4,y4,x5,y5,k,count);

    k=10;
    count++;
    bspline(x3,y3,x4,y4,x5,y5,x6,y6,k,count);
}

```

```
while(!kbhit())
    delay(50);

closegraph();

return EXIT_SUCCESS;
}
```

