**Practical No: 12**

**Aim :** Write a Program to implement Bezier Curve..

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**Class :** BCA-III SEM-V

**Date :** 10/09/2024

**Code :**

#include<graphics.h>

#include<math.h>

void bezier(int x[4],int y[4])

{

int i;

double t;

for(t=0.0;t<1.0;t+=0.0005)

{

double 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];

double 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,0);

}

for(i=0;i<4;i++)

putpixel(x[i],y[i],0);

}

int main()

{

int x[4]={250,200,80,60};

int y[4]={250,200,70,200};

initwindow(450,450);

setbkcolor(WHITE);

cleardevice();

bezier(x,y);

getch();

return 0;

}

**Output:**

