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| #include<stdio.h> |
|  | #include<graphics.h> |
|  | #include<conio.h> |
|  | #include<math.h> |
|  | void triangle(int x1,int y1,int x2,int y2,int x3,int y3) |
|  | { |
|  | line(x1,y1,x2,y2); |
|  | line(x2,y2,x3,y3); |
|  | line(x3,y3,x1,y1); |
|  | } |
|  | void Rotate(int x1,int y1,int x2,int y2,int x3,int y3) |
|  | { |
|  | int x,y,a1,b1,a2,b2,a3,b3,p=x2,q=y2; |
|  | float theta; |
|  | printf("Enter the angle for rotation:"); |
|  | scanf("%f",&theta); |
|  | cleardevice(); |
|  | theta=(theta\*3.14)/180; |
|  | a1=p+(x1-p)\*cos(theta)-(y1-q)\*sin(theta); |
|  | b1=q+(x1-p)\*sin(theta)+(y1-q)\*cos(theta); |
|  | a2=p+(x2-p)\*cos(theta)-(y2-q)\*sin(theta); |
|  | b2=q+(x2-p)\*sin(theta)+(y2-q)\*cos(theta); |
|  | a3=p+(x3-p)\*cos(theta)-(y3-q)\*sin(theta); |
|  | b3=q+(x3-p)\*sin(theta)+(y3-q)\*cos(theta); |
|  | printf("Rotate"); |
|  | triangle(a1,b1,a2,b2,a3,b3); |
|  | } |
|  |  |
|  | void main() |
|  | { |
|  | int gd=DETECT,gm; |
|  | int x1,y1,x2,y2,x3,y3; |
|  | initgraph(&gd,&gm," "); |
|  | printf("Enter the 1st point for the triangle:"); |
|  | scanf("%d%d",&x1,&y1); |
|  | printf("Enter the 2nd point for the triangle:"); |
|  | scanf("%d%d",&x2,&y2); |
|  | printf("Enter the 3rd point for the triangle:"); |
|  | scanf("%d%d",&x3,&y3); |
|  | triangle(x1,y1,x2,y2,x3,y3); |
|  | getch(); |
|  | cleardevice(); |
|  | Rotate(x1,y1,x2,y2,x3,y3); |
|  | setcolor(5); |
|  | triangle(x1,y1,x2,y2,x3,y3); |
|  | getch(); |
|  | } |
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