```c
#include <stdio.h>
#include <math.h>
#include <conio.h>
#include <graphics.h>
void RotateTriangle(int x1, int y1, int x2, int y2, int x3, int y3, float
angle)
{
    int a1, b1, a2, b2, a3, b3;
    int p = x2;
    int q = y2;
    float rad = (angle * 3.141) / 180.0;
    a1 = p + (x1 - p) * cos(rad) - (y1 - q) * sin(rad);
    b1 = q + (x1 - p) * sin(rad) - (y1 - q) * cos(rad);
    a2 = p + (x2 - p) * cos(rad) - (y2 - q) * sin(rad);
    b2 = q + (x2 - p) * sin(rad) - (y2 - q) * cos(rad);
    a3 = p + (x3 - p) * cos(rad) - (y3 - q) * sin(rad);
    b3 = q + (x3 - p) * sin(rad) - (y3 - q) * cos(rad);
    setcolor(GREEN);
    line(a1, b1, a2, b2);
    line(a2, b2, a3, b3);
    line(a3, b3, a1, b1);
}
void main()
{
    int gd = DETECT, gm;
    int x, y, x1, y1, x2, y2, tx, ty;
    int sx, sy;
    float angle;
    initgraph(&gd, &gm, "");
    printf("Enter the first co-ordinate of triangle : ");
    scanf("%d %d", &x, &y);
    printf("Enter the second co-ordinate of triangle : ");
    scanf("%d %d", &x1, &y1);
    printf("Enter the third co-ordinate of triangle : ");
    scanf("%d %d", &x2, &y2);
    line(x, y, x1, y1);
    line(x1, y1, x2, y2);
    line(x2, y2, x, y);
    printf("Enter the translation vector : ");
    scanf("%d %d", &tx, &ty);
    setcolor(GREEN);
    line(x + tx, y + ty, x1 + tx, y1 + ty);
    line(x1 + tx, y1 + ty, x2 + tx, y2 + ty);
    line(x2 + tx, y2 + ty, x + tx, y + ty);
    getch();
    printf("Enter the scaling factor of x and y : ");
    scanf("%d %d", &sx, &sy);
    x = x * sx;
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    x1 = x1 * sx;
    x2 = x2 * sx;
    y = y * sy;
    y1 = y1 * sy;
    y2 = y2 * sy;
    setcolor(GREEN);
    line(x, y, x1, y1);
    line(x1, y1, x2, y2);
    line(x2, y2, x, y);
    getch();
    printf("Enter the angle for rotation : ");
    scanf("%f", &angle);
    RotateTriangle(x, y, x1, y1, x2, y2, angle);
    getch();
    closegraph();
}
```