

Answer :- Write a program to scale a triangle about origin.

```
#include<stdio.h>

#include<graphics.h>

#include<math.h>

void scaling(int x1,int y1,int x2,int y2,int x3,int y3)
{
    int sx,sy,xn1,yn1,xn2,xn3,yn2,yn3,gd=0,gm;
    printf("enter the scaling vector\n");
    scanf("%d%d",&sx,&sy); xn1=x1*sx;

    yn1=y1*sy;

    xn2=x2*sx;

    yn2=y2*sy;

    xn3=x3*sx;

    yn3=y3*sy;

    initgraph(&gd,&gm,"");
    setcolor(WHITE);
    line(x1,y1,x2,y2);
    setcolor(WHITE);
    line(x1,y1,x3,y3);
    setcolor(WHITE);
    line(x2,y2,x3,y3);
    delay(600);
    setcolor(WHITE);
    line(xn1,yn1,xn2,yn2);
    setcolor(WHITE);
    line(xn1,yn1,xn3,yn3);
    setcolor(WHITE);
    line(xn2,yn2,xn3,yn3);
    delay(600);
}
```

```
int main( )
{
    int ch,x1,y1,x2,y2,x3,y3;
    printf("enter the vertex co-ordinates of triangle\n");
    scanf("%d %d %d %d %d %d",&x1,&y1,&x2,&y2,&x3,&y3);
    scaling(x1,y1,x2,y2,x3,y3);
    delay(9999);
    return 0;
}
```

