**Reflection**

#include <conio.h>

#include <graphics.h>

#include <stdio.h>

void main()

{

int gm, gd = DETECT, ax, x1 = 100;

int x2 = 100, x3 = 200, y1 = 100;

int y2 = 200, y3 = 100;

initgraph(&gd, &gm, "C:\\TURBOC3\\BGI");

cleardevice();

line(getmaxx() / 2, 0, getmaxx() / 2,getmaxy());

line(0, getmaxy() / 2, getmaxx(),

getmaxy() / 2);

printf("Before Reflection Object"

" in 2nd Quadrant");

setcolor(14);

line(x1, y1, x2, y2);

line(x2, y2, x3, y3);

line(x3, y3, x1, y1);

getch();

printf("\nAfter Reflection");

setcolor(4);

line(getmaxx() - x1, getmaxy() - y1,

getmaxx() - x2, getmaxy() - y2);

line(getmaxx() - x2, getmaxy() - y2,

getmaxx() - x3, getmaxy() - y3);

line(getmaxx() - x3, getmaxy() - y3,

getmaxx() - x1, getmaxy() - y1);

setcolor(3);

line(getmaxx() - x1, y1,

getmaxx() - x2, y2);

line(getmaxx() - x2, y2,

getmaxx() - x3, y3);

line(getmaxx() - x3, y3,

getmaxx() - x1, y1);

setcolor(2);

line(x1, getmaxy() - y1, x2,

getmaxy() - y2);

line(x2, getmaxy() - y2, x3,

getmaxy() - y3);

line(x3, getmaxy() - y3, x1,

getmaxy() - y1);

getch();

closegraph();

}

**Shear on y**

#include<stdio.h>

#include<graphics.h>

#include<conio.h>

void main()

{

int gd=DETECT,gm;

int x,y,x1,y1,x2,y2,shear\_f;

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");

printf("\n please enter first coordinate = ");

scanf("%d %d",&x,&y);

printf("\n please enter second coordinate = ");

scanf("%d %d",&x1,&y1);

printf("\n please enter third coordinate = ");

scanf("%d %d",&x2,&y2);

printf("\n please enter shearing factor y = ");

scanf("%d",&shear\_f);

cleardevice();

line(x,y,x1,y1);

line(x1,y1,x2,y2);

line(x2,y2,x,y);

setcolor(RED);

y=y+ x\*shear\_f;

y1=y1+ x1\*shear\_f;

y2=y2+ x2\*shear\_f;

line(x,y,x1,y1);

line(x1,y1,x2,y2);

line(x2,y2,x,y);

getch();

closegraph();

}

**Shear on X**

#include<stdio.h>

#include<graphics.h>

#include<conio.h>

void main()

{

int gd=DETECT,gm;

int x,y,x1,y1,x2,y2,shear\_f;

initgraph(&gd,&gm,"C:\\TURBOC3\\BGI");

printf("\n please enter first coordinate = ");

scanf("%d %d",&x,&y);

printf("\n please enter second coordinate = ");

scanf("%d %d",&x1,&y1);

printf("\n please enter third coordinate = ");

scanf("%d %d",&x2,&y2);

printf("\n please enter shearing factor x = ");

scanf("%d",&shear\_f);

cleardevice();

line(x,y,x1,y1);

line(x1,y1,x2,y2);

line(x2,y2,x,y);

setcolor(RED);

x=x+ y\*shear\_f;

x1=x1+ y1\*shear\_f;

x2=x2+ y2\*shear\_f;

line(x,y,x1,y1);

line(x1,y1,x2,y2);

line(x2,y2,x,y);

getch();

closegraph();

}