**Practical No: 04**

**Aim :** Write a c program to perform 2-D Shearing Transformation in Geometrical Transformation

**Performed By :**

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

**Date:** 09/09/2024

**Code :**

#include <conio.h>

#include <graphics.h>

#include <stdio.h>

int main()

{

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

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

int y2 = 200, y3 = 100;

initgraph(&gd, &gm, "");

cleardevice();

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

getmaxy());

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

getmaxy() / 2);

printf("Before Reflection Object"

" in 2nd Quadrant");

setcolor(4);

line(x1, y1, x2, y2);

line(x2, y2, x3, y3);

line(x3, y3, x1, y1);

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();

}

**Output :**

