**Practical No: 01**

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

**Performed By :** Vedant Bhojane

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

**Date:** 14/08/24

**Code :**

#include<stdio.h>

#include<conio.h>

#include<graphics.h>

int gd = DETECT,gm;

int n,xs[100],ys[100],i,ty,tx;

void draw();

void translate();

int main()

{

printf("Enter no. of sides in polygon: ");

scanf("%d",&n);

printf("Enter coordinates x,y for each vertex: ");

for(i=0;i<n;i++)

scanf("%d%d",&xs[i],&ys[i]);

printf("Enter distances for translation in x and y directions : ");

scanf("%d%d",&tx,&ty);

initgraph(&gd, &gm,(char\*)"");

cleardevice();

setcolor(RED);

draw();

translate();

setcolor(YELLOW);

draw();

getch();

}

void draw()

{

for(i=0;i<n;i++){

line(xs[i],ys[i],xs[(i+1)%n],ys[(i+1)%n]);

}

}

void translate()

{

for(i=0;i<n;i++)

{

xs[i]+=tx;

ys[i]+=ty;

}

}

**Output :**

