//---------------------------------------------------------------------------

#include <vcl.h>

#include <math.h>

#pragma hdrstop

#include "Unit1.h"

//---------------------------------------------------------------------------

#pragma package(smart\_init)

#pragma resource "\*.dfm"

int i, j;

TForm1 \*Form1;

//---------------------------------------------------------------------------

\_\_fastcall TForm1::TForm1(TComponent\* Owner)

: TForm(Owner)

{

}

//---------------------------------------------------------------------------

void \_\_fastcall TForm1::Button1Click(TObject \*Sender)

{

int Tx=StrToInt(Edit1->Text);

int Ty=StrToInt(Edit2->Text);

int x = Image1->Height;

int y = Image1->Width;

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

{

for(j=0;j<=y;j++)

{

int a = i + Tx;

int b = j + Ty;

Image2->Canvas->Pixels[a][b] = Image1->Canvas->Pixels[i][j];

}

}

}

//---------------------------------------------------------------------------

void \_\_fastcall TForm1::Button2Click(TObject \*Sender)

{

int theta =StrToInt(Edit3->Text);

int x = Image1->Height;

int y = Image1->Width;

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

{

for(j=0;j<=y;j++)

{

int a = i\*cos(theta)-j\*sin(theta);

int b = j\*cos(theta)+i\*sin(theta);

Image2->Canvas->Pixels[a][b] = Image1->Canvas->Pixels[i][j];

}

}

}

void \_\_fastcall TForm1::Button3Click(TObject \*Sender)

{

int Sx = StrToInt(Edit4->Text);

int Sy = StrToInt(Edit5->Text);

int x = Image1->Height;

int y = Image1->Width;

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

{

for(j=0;j<=y;j++)

{

int a = i \* Sx;

int b = j \* Sy;

Image2->Canvas->Pixels[a][b] = Image1->Canvas->Pixels[i][j];

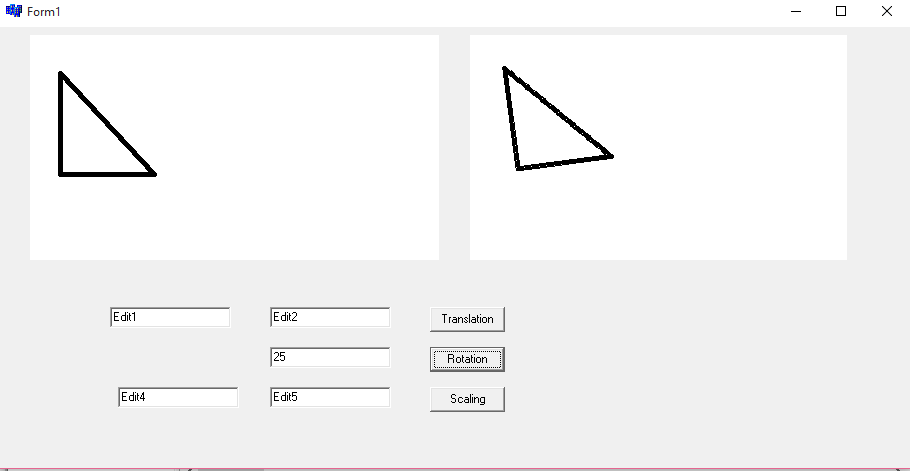
}

}

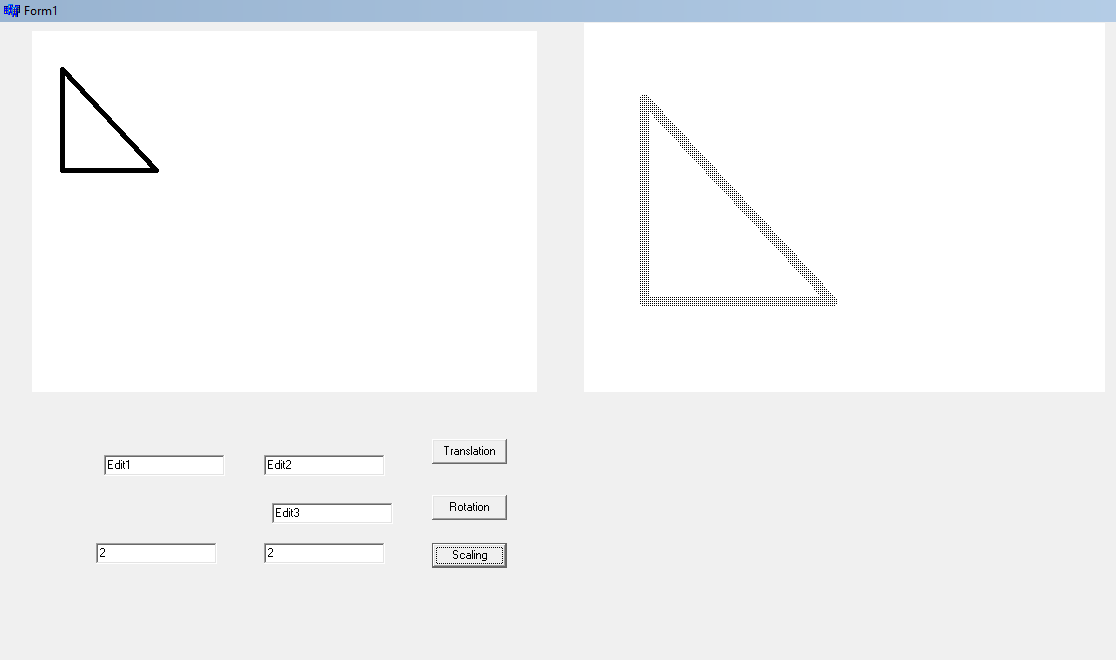
}

//---------------------------------------------------------------------------

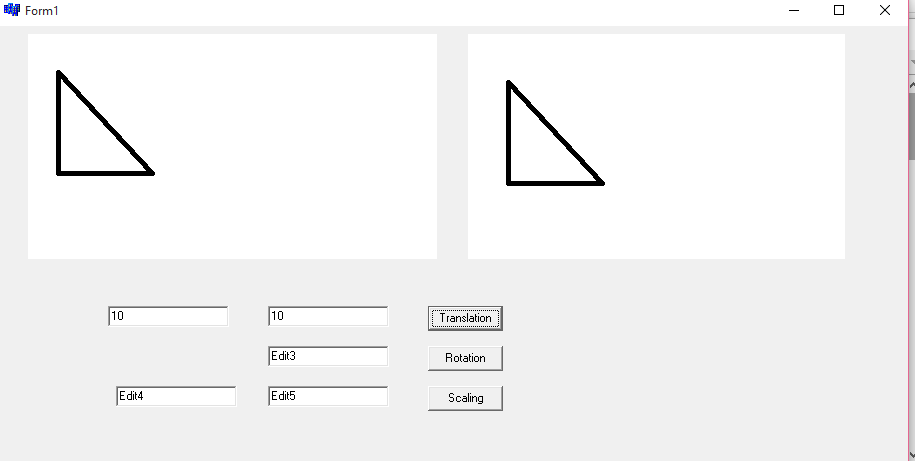
**OUTPUT SCREEN:**

****

**Fig: Rotation**

****

**Fig: Scaling**

****

**Fig: Translation**