ST. XAVIER’S COLLEGE

**(Affiliated to Tribhuvan University)**

Maitighar, Kathmandu



**Computer Graphics Lab Assignment #9**

**Submitted by:**

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**Submitted to:**

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**STATEMENT**

“Shear any user given image about X axis and Y axis using shear factor on C++ Builder”.

**SOURCE CODE**

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

#include <vcl\vcl.h>

#pragma hdrstop

#include "shear.h"

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

#pragma resource "\*.dfm"

TForm1 \*Form1;

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

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

: TForm(Owner)

{

}

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

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

{

outPanel->Canvas->FillRect(ClientRect);

int a,b,i,j,h,w;

float sx,sy;

sx= StrToFloat(inSx->Text);

sy= StrToFloat(inSy->Text);

h=inPanel->Height;

w=inPanel->Width;

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

for(j=0;j<=h;j++){

a=(int)i+sx\*j;

b=(int)j+sy\*i;

outPanel->Canvas->Pixels[a][b] = inPanel->Canvas->Pixels[i][j];

}

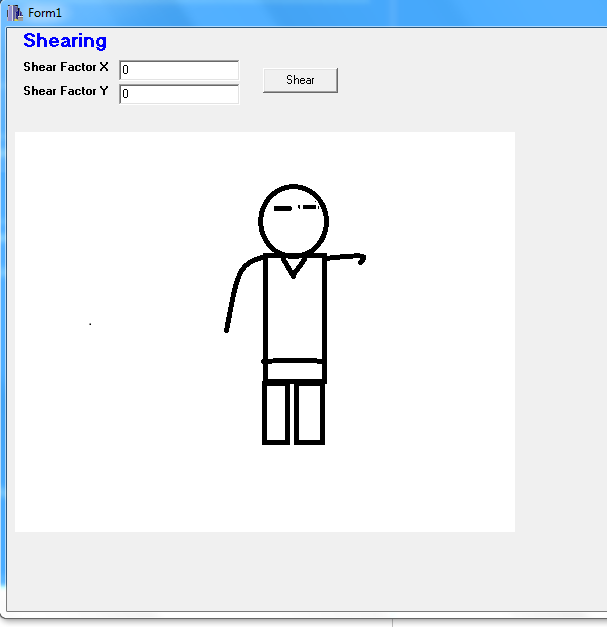
}

}

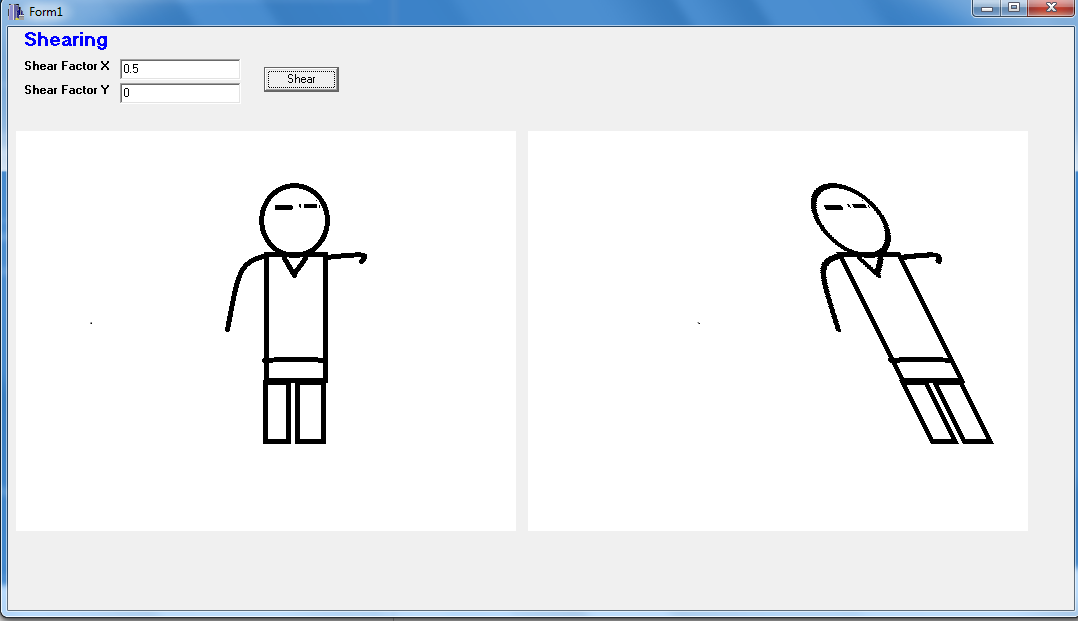
//---------------------------------------------------------------------------

**OUTPUT**

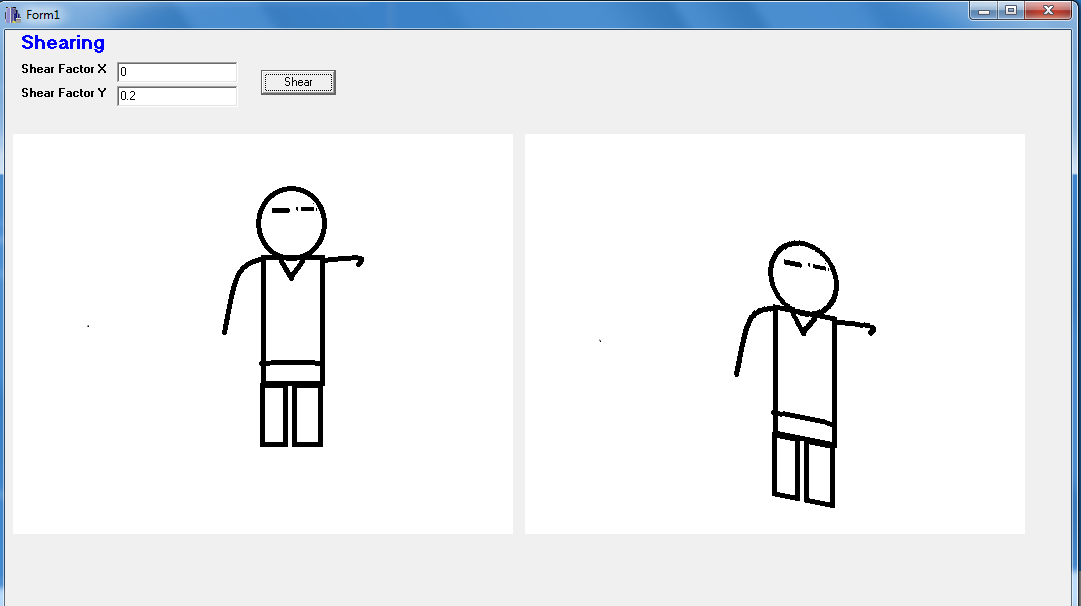
**Input Image**

****

**Shear on X axis**

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**Shear on Y axis**

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**CONCLUSION**

Thus, Shear about X-axis and Y axis is done using C++ builder.