**ST. XAVIER’S COLLEGE**

**(Affiliated to Tribhuvan University)**

Maitighar, Kathmandu



**Computer Graphics**

**Lab Assignment#8**

**Submitted by:**

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**Submitted to:**

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**STATEMENT: IMPLEMENTATION OF REFLECTION ALONG X-AXIS AND Y-AXIS.**

Source code:

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

#include <vcl\vcl.h>

#pragma hdrstop

#include "Unit1.h"

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

#pragma resource "\*.dfm"

TForm1 \*Form1;

int x,y,a,b,i,j;

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

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

: TForm(Owner)

{

}

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

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

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

{

x=Image1->Height;

y=Image1->Width;

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

{

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

{

a=i;

b=j;

a+=x;

b+=y;

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

}

}

}

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

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

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

{

x=Image1->Height;

y=Image1->Width;

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

{

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

{

a=-i;

b=j;

a+=x;

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

}

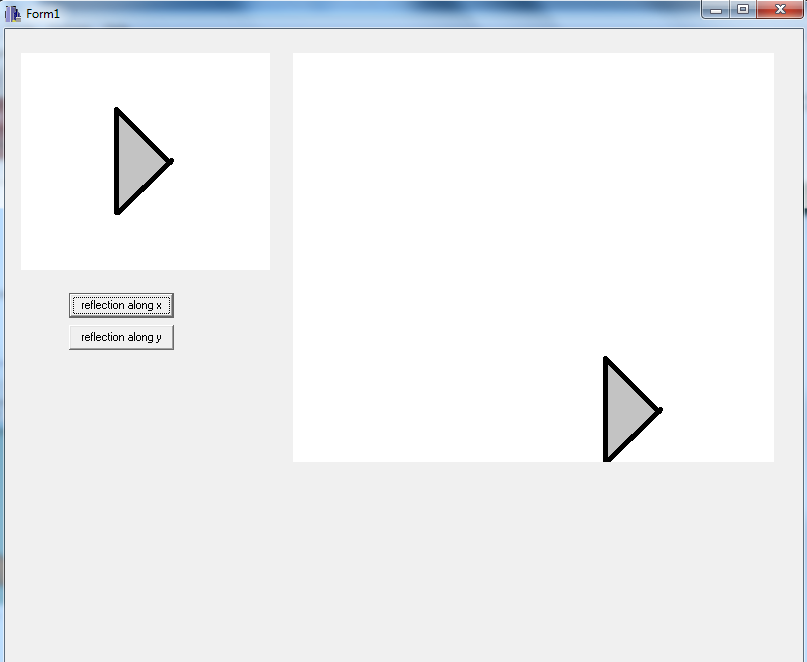
}

}

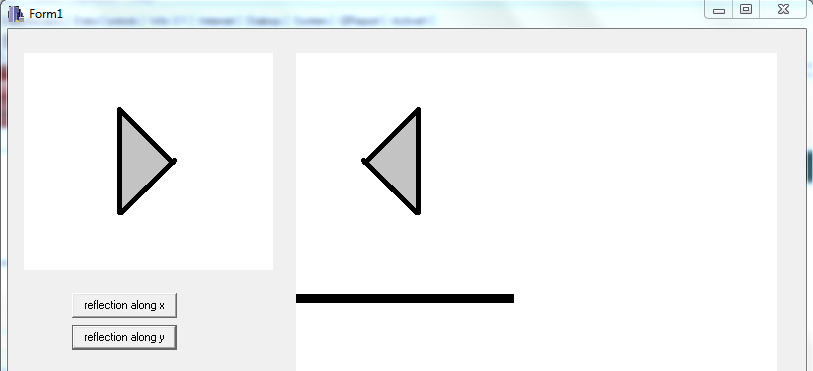
//---------------------------------------------------------------------------

**Output:**

**Along x-axis:**



**Along y-axis:**



**Conclusion:**

Therefore, reflection along both X-axis and Y-axis were implemented.

**Reference:**

[1] D. Hearn and M. Baker, Computer Graphics, second edition.