**St. Xavier’s College**

**(Affiliated to Tribhuvan University)**

**Maitighar, Kathmandu**



**COMPUTER GRAPHICS**

**LAB ASSIGNMENT #8**

**TO IMPLEMENT REFLECTION**

**Submitted By**

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**Submitted To**

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Department of Computer Science

Date of Submission: 8th Sep, 2015

**Write a program to implement a reflection using c++ builder.**

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

#include <vcl\vcl.h>

#pragma hdrstop

#include "Unit1.h"

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

#pragma resource "\*.dfm"

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

TForm1 \*Form1;

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

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

: TForm(Owner)

{

}

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

void \_\_fastcall TForm1::RefOriginClick(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=a+x;

b=b+y;

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

}

}

}

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

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

{

x = Image1->Height;

y = Image1->Width;

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

{

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

{

a = i;

b = -j;

b=b+y;

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

}

}

}

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

void \_\_fastcall TForm1::RefYClick(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=a+x;

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

}

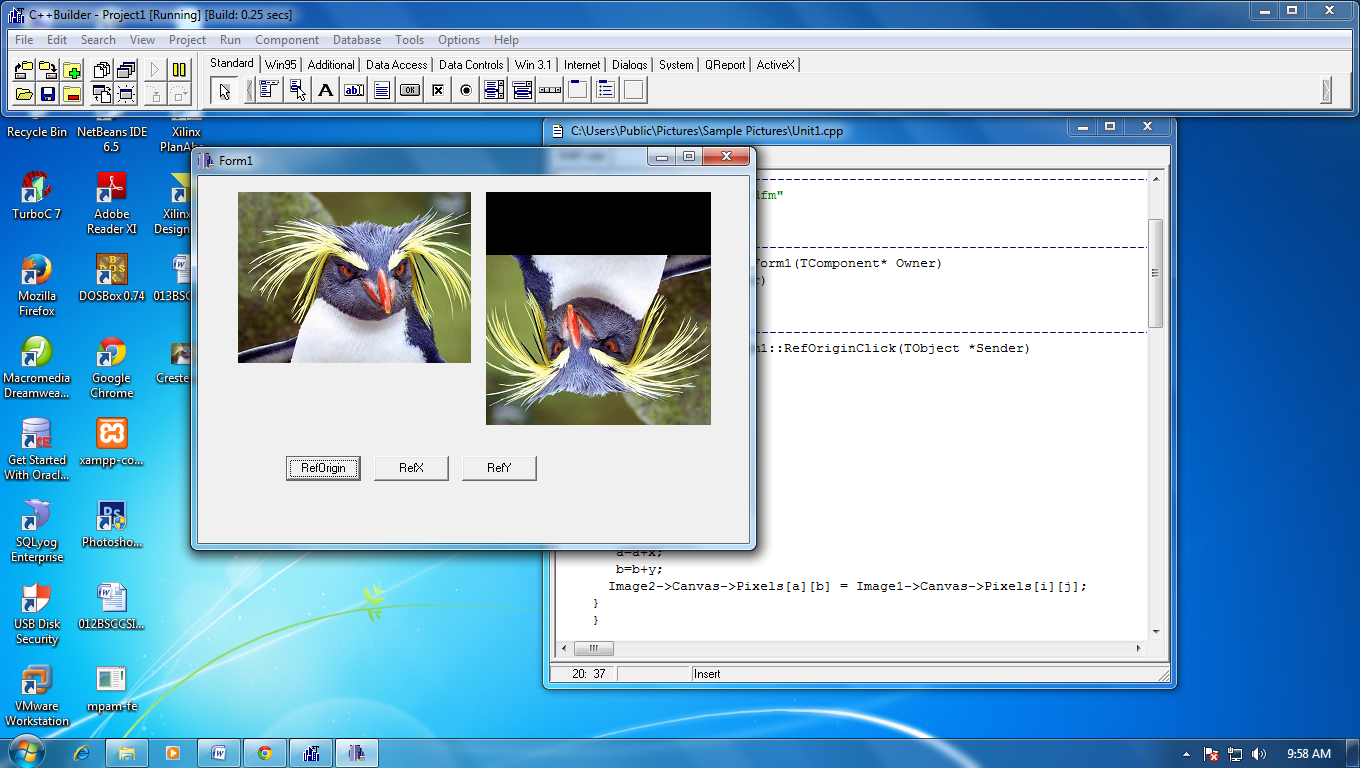
}

}

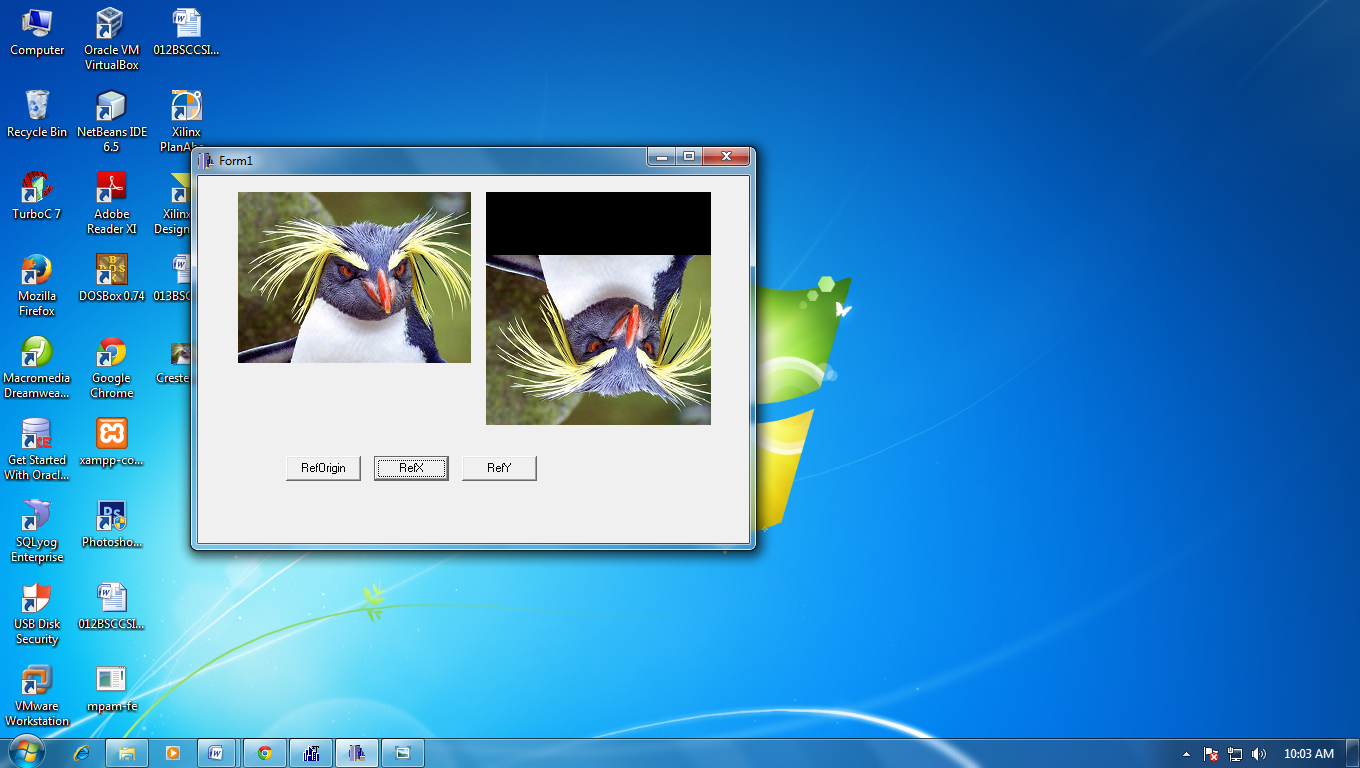
//---------------------------------------------------------------------------

**OUTPUT SCREEN**

Reflection about origin



Reflection about X axis



Reflection about Y axis

