ST. XAVIER’S COLLEGE

**(Affiliated to Tribhuvan University)**

Maitighar, Kathmandu



**Computer Graphics Lab Assignment #7**

**Submitted by:**

Sazjan Neupane

013BSCCSIT036

**Submitted to:**

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| Er. Anil Sah  Lecturer, St. Xavier’s College |  |

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**SOURCE CODE**

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

#include <vcl\vcl.h>

#pragma hdrstop

#include "Unit1.h"

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

#pragma resource "\*.dfm"

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

TReflect\_X \*Reflect\_X;

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

\_\_fastcall TReflect\_X::TReflect\_X(TComponent\* Owner)

: TForm(Owner)

{

}

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

void \_\_fastcall TReflect\_X::Reflect\_OriginClick(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 TReflect\_X::Reflect\_xClick(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 TReflect\_X::Reflect\_YClick(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**

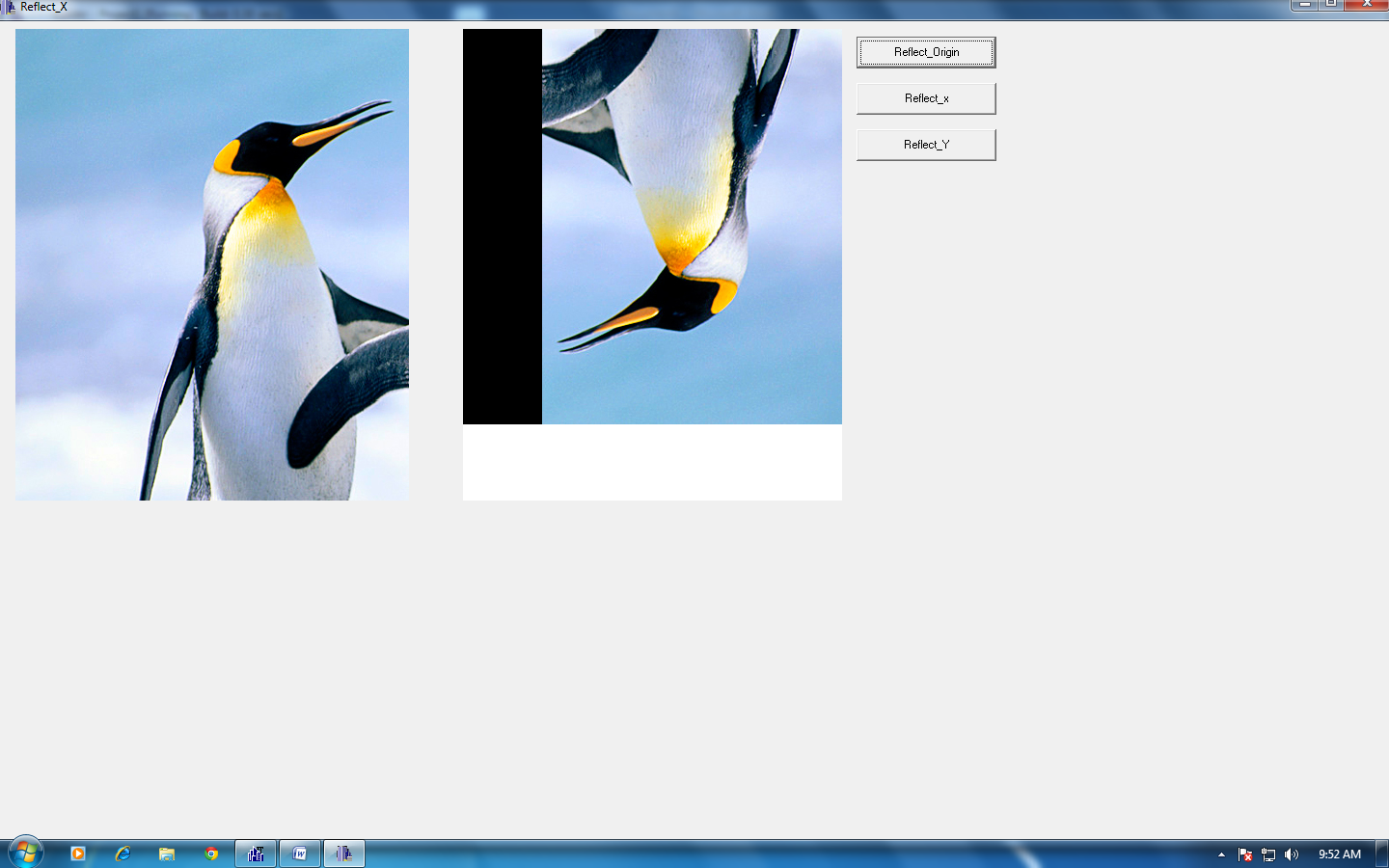


Fig. Reflection about origin.

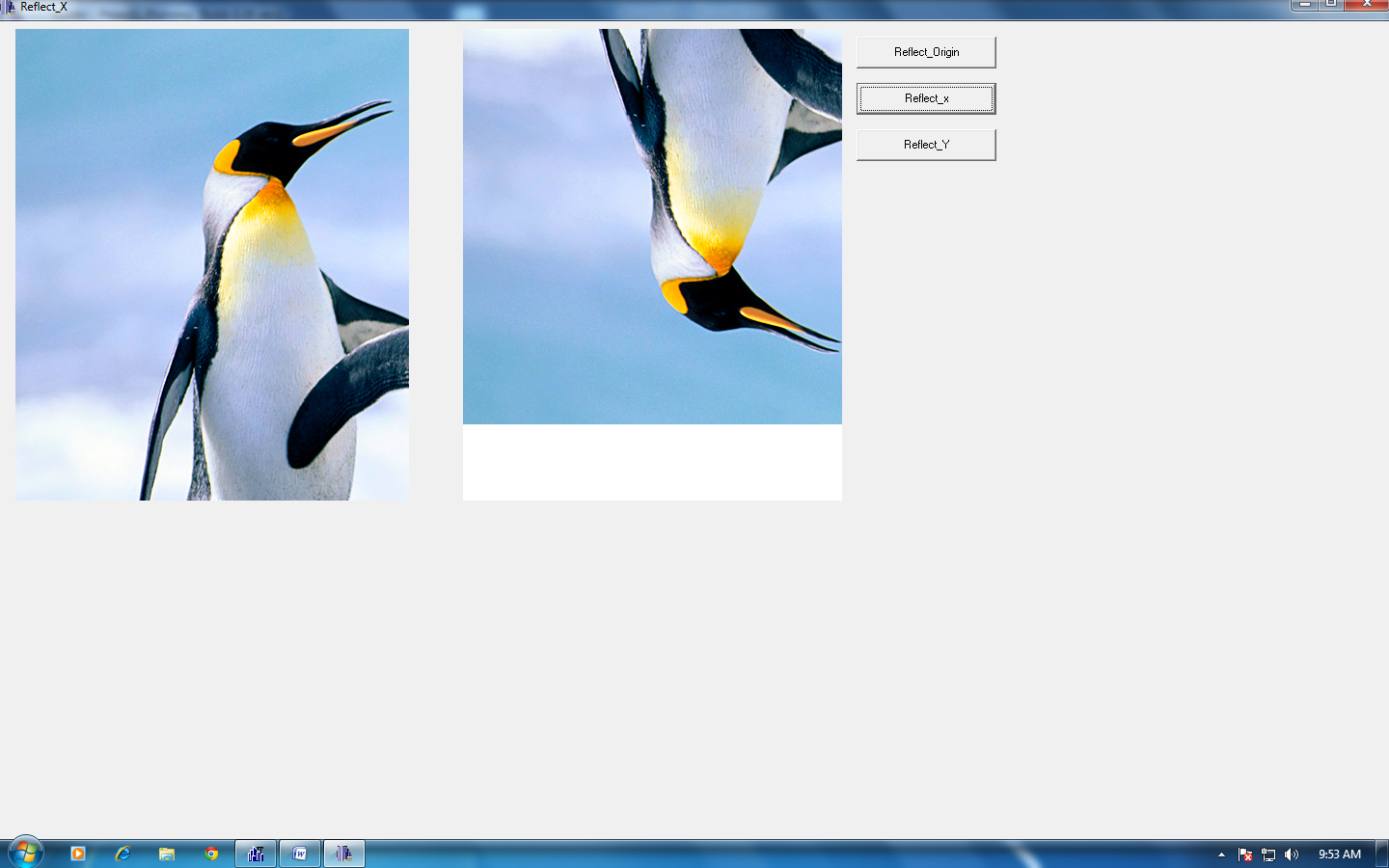


Fig. Reflection about x axis.

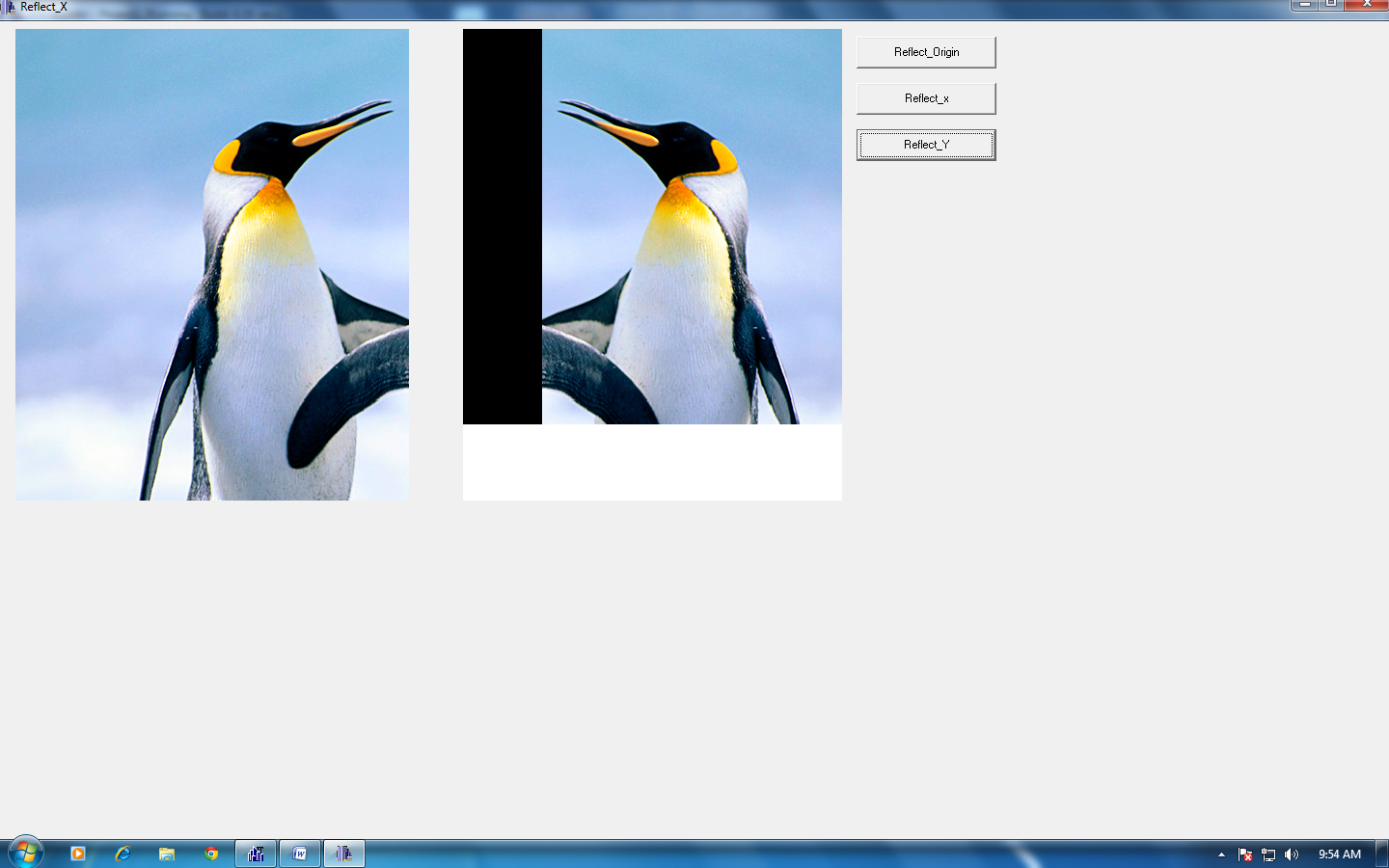


Fig. Reflection about y axis.