Exercise 9.2
```
// In Form1.h

#pragma once
#include "Arith.h"
#include <stdlib.h>


namespace Ex92 {

    using namespace System;
    using namespace System::ComponentModel;
    using namespace System::Collections;
    using namespace System::Windows::Forms;
    using namespace System::Data;
    using namespace System::Drawing;
    using namespace System::Runtime::InteropServices;

    /// <summary>
    /// Summary for Form1
    ///
    /// WARNING: If you change the name of this class, you will need to change the
    ///          'Resource File Name' property for the managed resource compiler tool
    ///          associated with all .resx files this class depends on.  Otherwise,
    ///          the designers will not be able to interact properly with localized
    ///          resources associated with this form.
    /// </summary>
    public ref class Form1 : public System::Windows::Forms::Form
    {
    public:
        Form1(void)
        {
            InitializeComponent();
            //
            //TODO: Add the constructor code here
            //
        }

    protected:
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        ~Form1()
        {
            if (components)
            {
                delete components;
            }
        }
    private: System::Windows::Forms::Label^  label1;
    protected:
    private: System::Windows::Forms::TextBox^  textBox1;
    private: System::Windows::Forms::TextBox^  textBox2;
    private: System::Windows::Forms::Button^  button1;
    private: System::Windows::Forms::Button^  button2;
    private: System::Windows::Forms::Button^  button3;
    private: System::Windows::Forms::Button^  button4;

    private:
        /// <summary>
        /// Required designer variable.
        /// </summary>
        System::ComponentModel::Container ^components;

#pragma region Windows Form Designer generated code
        /// <summary>
        /// Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        void InitializeComponent(void)
        {
```

```cpp
            this->label1 = (gcnew System::Windows::Forms::Label());
            this->textBox1 = (gcnew System::Windows::Forms::TextBox());
            this->textBox2 = (gcnew System::Windows::Forms::TextBox());
            this->button1 = (gcnew System::Windows::Forms::Button());
            this->button2 = (gcnew System::Windows::Forms::Button());
            this->button3 = (gcnew System::Windows::Forms::Button());
            this->button4 = (gcnew System::Windows::Forms::Button());
            this->SuspendLayout();
            //
            // label1
            //
            this->label1->AutoSize = true;
            this->label1->Location = System::Drawing::Point(46, 23);
            this->label1->Name = L"label1";
            this->label1->Size = System::Drawing::Size(129, 13);
            this->label1->TabIndex = 0;
            this->label1->Text = L"Please enter two numbers";
            //
            // textBox1
            //
            this->textBox1->Location = System::Drawing::Point(49, 56);
            this->textBox1->Name = L"textBox1";
            this->textBox1->Size = System::Drawing::Size(100, 20);
            this->textBox1->TabIndex = 1;
            //
            // textBox2
            //
            this->textBox2->Location = System::Drawing::Point(49, 93);
            this->textBox2->Name = L"textBox2";
            this->textBox2->Size = System::Drawing::Size(100, 20);
            this->textBox2->TabIndex = 2;
            //
            // button1
            //
            this->button1->Location = System::Drawing::Point(49, 140);
            this->button1->Name = L"button1";
            this->button1->Size = System::Drawing::Size(75, 23);
            this->button1->TabIndex = 3;
            this->button1->Text = L"Add";
            this->button1->UseVisualStyleBackColor = true;
            this->button1->Click += gcnew System::EventHandler(this,
&Form1::button1_Click);
            //
            // button2
            //
            this->button2->Location = System::Drawing::Point(183, 140);
            this->button2->Name = L"button2";
            this->button2->Size = System::Drawing::Size(75, 23);
            this->button2->TabIndex = 4;
            this->button2->Text = L"Subtract";
            this->button2->UseVisualStyleBackColor = true;
            this->button2->Click += gcnew System::EventHandler(this,
&Form1::button2_Click);
            //
            // button3
            //
            this->button3->Location = System::Drawing::Point(49, 190);
            this->button3->Name = L"button3";
            this->button3->Size = System::Drawing::Size(75, 23);
            this->button3->TabIndex = 5;
            this->button3->Text = L"Multiply";
            this->button3->UseVisualStyleBackColor = true;
            this->button3->Click += gcnew System::EventHandler(this,
&Form1::button3_Click);
            //
            // button4
            //
            this->button4->Location = System::Drawing::Point(183, 189);
            this->button4->Name = L"button4";
            this->button4->Size = System::Drawing::Size(75, 23);
            this->button4->TabIndex = 6;
```

```cpp
                this->button4->Text = L"Divide";
                this->button4->UseVisualStyleBackColor = true;
                this->button4->Click += gcnew System::EventHandler(this,
&Form1::button4_Click);
                //
                // Form1
                //
                this->AutoScaleDimensions = System::Drawing::SizeF(6, 13);
                this->AutoScaleMode = System::Windows::Forms::AutoScaleMode::Font;
                this->ClientSize = System::Drawing::Size(292, 273);
                this->Controls->Add(this->button4);
                this->Controls->Add(this->button3);
                this->Controls->Add(this->button2);
                this->Controls->Add(this->button1);
                this->Controls->Add(this->textBox2);
                this->Controls->Add(this->textBox1);
                this->Controls->Add(this->label1);
                this->Name = L"Form1";
                this->Text = L"Form1";
                this->ResumeLayout(false);
                this->PerformLayout();

        }
#pragma endregion
    private: System::Void button1_Click(System::Object^  sender, System::EventArgs^  e)
{
                int num1, num2, res;
                String ^ tbstr1 = textBox1->Text;
                String ^ tbstr2 = textBox2->Text;
                char *strNum1 = (char*)Marshal::StringToHGlobalAnsi(tbstr1).ToPointer();
                char *strNum2 = (char*)Marshal::StringToHGlobalAnsi(tbstr2).ToPointer();
                num1 = atoi(strNum1);
                num2 = atoi(strNum2);
                Arithmetic Op;           // Class from the static library
                Op.SetNum(num1,num2); // Using the unmanaged codes
                res = Op.Add();          // Using the unmanaged codes
                MessageBox::Show(""+res,"Result",MessageBoxButtons::OK);
                Marshal::FreeHGlobal((IntPtr)strNum1);
                Marshal::FreeHGlobal((IntPtr)strNum2);
        }
    private: System::Void button2_Click(System::Object^  sender, System::EventArgs^  e)
{
                int num1, num2, res;
                String ^ tbstr1 = textBox1->Text;
                String ^ tbstr2 = textBox2->Text;
                char *strNum1 = (char*)Marshal::StringToHGlobalAnsi(tbstr1).ToPointer();
                char *strNum2 = (char*)Marshal::StringToHGlobalAnsi(tbstr2).ToPointer();
                num1 = atoi(strNum1);
                num2 = atoi(strNum2);
                Arithmetic Op;           // Class from the static library
                Op.SetNum(num1,num2); // Using the unmanaged codes
                res = Op.Subtract();   // Using the unmanaged codes
                MessageBox::Show(""+res,"Result",MessageBoxButtons::OK);
                Marshal::FreeHGlobal((IntPtr)strNum1);
                Marshal::FreeHGlobal((IntPtr)strNum2);
        }
    private: System::Void button3_Click(System::Object^  sender, System::EventArgs^  e)
{
                int num1, num2, res;
                String ^ tbstr1 = textBox1->Text;
                String ^ tbstr2 = textBox2->Text;
                char *strNum1 = (char*)Marshal::StringToHGlobalAnsi(tbstr1).ToPointer();
                char *strNum2 = (char*)Marshal::StringToHGlobalAnsi(tbstr2).ToPointer();
                num1 = atoi(strNum1);
                num2 = atoi(strNum2);
                Arithmetic Op;           // Class from the static library
                Op.SetNum(num1,num2); // Using the unmanaged codes
                res = Op.Multiply();   // Using the unmanaged codes
                MessageBox::Show(""+res,"Result",MessageBoxButtons::OK);
                Marshal::FreeHGlobal((IntPtr)strNum1);
                Marshal::FreeHGlobal((IntPtr)strNum2);
```

```cpp
        }
    private: System::Void button4_Click(System::Object^  sender, System::EventArgs^  e)
{
            int num1, num2, res;
            String ^ tbstr1 = textBox1->Text;
            String ^ tbstr2 = textBox2->Text;
            char *strNum1 = (char*)Marshal::StringToHGlobalAnsi(tbstr1).ToPointer();
            char *strNum2 = (char*)Marshal::StringToHGlobalAnsi(tbstr2).ToPointer();
            num1 = atoi(strNum1);
            num2 = atoi(strNum2);
            if (num2!=0)
            {
                Arithmetic Op;          // Class from the static libray
                Op.SetNum(num1,num2); // Using the unmanaged codes
                res = Op.Divide();      // Using the unmanaged codes
                MessageBox::Show(""+res,"Result",MessageBoxButtons::OK);
            }
            else
                MessageBox::Show("Divisor=0!","Result",MessageBoxButtons::OK);
            Marshal::FreeHGlobal((IntPtr)strNum1);
            Marshal::FreeHGlobal((IntPtr)strNum2);
        }
};
}


// In project Ex92Lib
// In file Arith.h
class Arithmetic          // declare the class
{
public:  void SetNum (int, int);
         int GetNum1();
         int GetNum2();
         int Add();              // return num1 + num2
         int Subtract();   // return num1 - num2
         int Multiply();   // return num1*num2
         int Divide();     // return num1/num2
private: int num1;
         int num2;
};

// In project Ex92Lib
// In file Ex92Code.cpp
#include "Arithmetic.h"

void Arithmetic::SetNum(int in1, int in2)
{    num1 = in1; num2 = in2;
}
int Arithmetic::GetNum1()
{    return num1;
}
int Arithmetic::GetNum2()
{    return num2;
}
int Arithmetic::Add()
{    return num1 + num2;
}
int Arithmetic::Subtract()
{    return num1 - num2;
}
int Arithmetic::Multiply()
{    return num1 * num2;
}
int Arithmetic::Divide()
{
     return num1/num2;
}
```