Exercise 9.3
```
// In Form1.h
#pragma once
#include "Form2.h" // Add to the beginning of Form1.h
#include <stdlib.h>
#include <time.h> // For srand()'s input parameter

namespace Ex9_3 {

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

    /// <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::GroupBox^  groupBox1;
    protected:
    private: System::Windows::Forms::RadioButton^  radioButton4;
    private: System::Windows::Forms::RadioButton^  radioButton3;
    private: System::Windows::Forms::RadioButton^  radioButton2;
    private: System::Windows::Forms::RadioButton^  radioButton1;
    private: System::Windows::Forms::Button^  button1;
    private: System::Windows::Forms::Button^  button2;

    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)
        {
            this->groupBox1 = (gcnew System::Windows::Forms::GroupBox());
            this->radioButton4 = (gcnew System::Windows::Forms::RadioButton());
```

```cpp
			this->radioButton3 = (gcnew System::Windows::Forms::RadioButton());
			this->radioButton2 = (gcnew System::Windows::Forms::RadioButton());
			this->radioButton1 = (gcnew System::Windows::Forms::RadioButton());
			this->button1 = (gcnew System::Windows::Forms::Button());
			this->button2 = (gcnew System::Windows::Forms::Button());
			this->groupBox1->SuspendLayout();
			this->SuspendLayout();
			//
			// groupBox1
			//
			this->groupBox1->Controls->Add(this->radioButton4);
			this->groupBox1->Controls->Add(this->radioButton3);
			this->groupBox1->Controls->Add(this->radioButton2);
			this->groupBox1->Controls->Add(this->radioButton1);
			this->groupBox1->Location = System::Drawing::Point(49, 27);
			this->groupBox1->Name = L"groupBox1";
			this->groupBox1->Size = System::Drawing::Size(231, 100);
			this->groupBox1->TabIndex = 0;
			this->groupBox1->TabStop = false;
			this->groupBox1->Text = L"Choose any one card";
			//
			// radioButton4
			//
			this->radioButton4->AutoSize = true;
			this->radioButton4->Location = System::Drawing::Point(127, 65);
			this->radioButton4->Name = L"radioButton4";
			this->radioButton4->Size = System::Drawing::Size(89, 17);
			this->radioButton4->TabIndex = 3;
			this->radioButton4->Text = L"Diamond Ace";
			this->radioButton4->UseVisualStyleBackColor = true;
			//
			// radioButton3
			//
			this->radioButton3->AutoSize = true;
			this->radioButton3->Location = System::Drawing::Point(21, 65);
			this->radioButton3->Name = L"radioButton3";
			this->radioButton3->Size = System::Drawing::Size(68, 17);
			this->radioButton3->TabIndex = 2;
			this->radioButton3->Text = L"Club Ace";
			this->radioButton3->UseVisualStyleBackColor = true;
			//
			// radioButton2
			//
			this->radioButton2->AutoSize = true;
			this->radioButton2->Location = System::Drawing::Point(127, 20);
			this->radioButton2->Name = L"radioButton2";
			this->radioButton2->Size = System::Drawing::Size(73, 17);
			this->radioButton2->TabIndex = 1;
			this->radioButton2->Text = L"Heart Ace";
			this->radioButton2->UseVisualStyleBackColor = true;
			//
			// radioButton1
			//
			this->radioButton1->AutoSize = true;
			this->radioButton1->Location = System::Drawing::Point(21, 20);
			this->radioButton1->Name = L"radioButton1";
			this->radioButton1->Size = System::Drawing::Size(78, 17);
			this->radioButton1->TabIndex = 0;
			this->radioButton1->Text = L"Spade Ace";
			this->radioButton1->UseVisualStyleBackColor = true;
			//
			// button1
			//
			this->button1->Location = System::Drawing::Point(118, 174);
			this->button1->Name = L"button1";
			this->button1->Size = System::Drawing::Size(75, 23);
			this->button1->TabIndex = 1;
			this->button1->Text = L"Show Card";
			this->button1->UseVisualStyleBackColor = true;
			this->button1->Click += gcnew System::EventHandler(this,
&Form1::button1_Click);
```

```cpp
            //
            // button2
            //
            this->button2->Location = System::Drawing::Point(118, 219);
            this->button2->Name = L"button2";
            this->button2->Size = System::Drawing::Size(75, 23);
            this->button2->TabIndex = 2;
            this->button2->Text = L"Random";
            this->button2->UseVisualStyleBackColor = true;
            this->button2->Click += gcnew System::EventHandler(this,
&Form1::button2_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->button2);
            this->Controls->Add(this->button1);
            this->Controls->Add(this->groupBox1);
            this->Name = L"Form1";
            this->Text = L"Form1";
            this->groupBox1->ResumeLayout(false);
            this->groupBox1->PerformLayout();
            this->ResumeLayout(false);

        }
#pragma endregion
    private: System::Void button1_Click(System::Object^  sender, System::EventArgs^
e)      {
            // Called when button1 of Form1 is clicked
            int card = 0; // 0 = no card, 1 = sA, 2 = hA, 3 = cA, 4 = dA
            if (radioButton1->Checked)
                card = 1;   // spade ace selected
            if (radioButton2->Checked)
                card = 2;     // heart ace selected
            if (radioButton3->Checked)
                card = 3;     // club ace selected
            if (radioButton4->Checked)
                card = 4;     // diamond ace selected
            Form2 ^ F2 = gcnew Form2(card); //Form2 defined in Form2.h
            F2->ShowDialog(); // Show modal form, return DialogResult value
        }

    private: System::Void button2_Click(System::Object^  sender, System::EventArgs^
e)      {
            // Seed the random-number generator with current time so that
            // the numbers will be different every time we run.
            srand( (unsigned)time( NULL ) );
            int card = rand()%4+1; // 1 = sA, 2 = hA, 3 = cA, 4 = dA
            Form2 ^ F2 = gcnew Form2(card); //Form2 defined in Form2.h
            F2->ShowDialog(); // Show modal form, return DialogResult value
        }
    };
}


// In Form2.h
#pragma once

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


namespace Ex9_3 {

    /// <summary>
```

```cpp
    /// Summary for Form2
    ///
    /// 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 Form2 : public System::Windows::Forms::Form
    {
    public:
        Form2(int c)
        {
            InitializeComponent();
            cd_no = c;  // 0 = no card, 1 = sA, 2 = hA, 3 = cA, 4 = dA
            face = 0; // By default, the card is face up (0).
            // When the card is clicked, the
            // state will toggle from face-up to
            // face-down or vice versa
            ShowCard(); // Show card based on the info in "cd_no"
        }

    protected:
        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        ~Form2()
        {
            if (components)
            {
                delete components;
            }
        }
    // Two private variables are added
    private:
        int cd_no;    // To keep the info of the card selected
        int face; // See the comment above
    private: System::Windows::Forms::PictureBox^  pictureBox1;
    private: System::Windows::Forms::Button^  button1;


    protected:

    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)
        {
            this->pictureBox1 = (gcnew System::Windows::Forms::PictureBox());
            this->button1 = (gcnew System::Windows::Forms::Button());
            (cli::safe_cast<System::ComponentModel::ISupportInitialize^
>(this->pictureBox1))->BeginInit();
            this->SuspendLayout();
            //
            // pictureBox1
            //
            this->pictureBox1->Location = System::Drawing::Point(90, 41);
            this->pictureBox1->Name = L"pictureBox1";
            this->pictureBox1->Size = System::Drawing::Size(100, 143);
            this->pictureBox1->TabIndex = 0;
            this->pictureBox1->TabStop = false;
            this->pictureBox1->Click += gcnew System::EventHandler(this,
&Form2::pictureBox1_Click);
```

```cpp
            //
            // button1
            //
            this->button1->DialogResult = System::Windows::Forms::DialogResult::OK;
            this->button1->Location = System::Drawing::Point(103, 214);
            this->button1->Name = L"button1";
            this->button1->Size = System::Drawing::Size(75, 23);
            this->button1->TabIndex = 1;
            this->button1->Text = L"OK";
            this->button1->UseVisualStyleBackColor = true;
            //
            // Form2
            //
            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->button1);
            this->Controls->Add(this->pictureBox1);
            this->Name = L"Form2";
            this->Text = L"Form2";
            (cli::safe_cast<System::ComponentModel::ISupportInitialize^
>(this->pictureBox1))->EndInit();
            this->ResumeLayout(false);


        }
#pragma endregion

        void ShowCard()
        {
            if (cd_no == 0)
            pictureBox1->Visible = 0;
            if (cd_no == 1)
            {   pictureBox1->Visible = 1;
                pictureBox1->Image = Image::
                FromFile("e:\\temp\\cards\\s1.gif");
            }
            if (cd_no == 2)
            {   pictureBox1->Visible = 1;
                pictureBox1->Image =
                Image::FromFile("e:\\temp\\cards\\h1.gif");
            }
            if (cd_no == 3)
            {   pictureBox1->Visible = 1;
                pictureBox1->Image =
                Image::FromFile("e:\\temp\\cards\\c1.gif");
            }
            if (cd_no == 4)
            {   pictureBox1->Visible = 1;
                pictureBox1->Image =
                Image::FromFile("e:\\temp\\cards\\d1.gif");
            }
        }

    private: System::Void pictureBox1_Click(System::Object^  sender,
System::EventArgs^  e) {
            if (cd_no != 0) // cd_no = 0 means no card is selected
            {   if (face == 0)  // face = 0 means face-up
                {   pictureBox1->Image =
Image::FromFile("e:\\temp\\cards\\b1fv.gif");
                    // Show the card as facing down, actually a different file is shown
                    face = 1; // Currently face-down
                } // codes for face==1 follow
                else     // It is face-down
                {   ShowCard();
                    face = 0; // currently face-up
                }
            }
        }
    };
}
```