

## PROG 8010 Assignment 1

You are only required to complete the programming problem that has been assigned to your group. However, you are encouraged to work through as many programming problems as possible.

Each group is to submit one solution to eConestoga. Someone in your group will be selected at random to present their solution to the class. Your mark on the assignment will depend on a combination of the quality, functionality, and adhesion to coding standards of your code. If you are absent without excuse, your mark for the presentation portion of the assignment (20%) is zero.

### Group 1/7 Problem – Latin Translator

Look at the following list of Latin words and their meanings:

Latin	English
sinister	left
dexter	right
medium	center

Create an application that translates the Latin words to English. The form should have three buttons, one for each Latin word. When the user clicks a button, the application should display the English translation in a Label control.

### Group 2/8 Problem – Clickable Number Images

Using the image files provided in the folder *Group 2 Images*, create an application that displays these images in Image/Button controls. The application should perform the following actions:

- When the user clicks the 1 image, the application will display the word *One* in a message box.
- When the user clicks the 2 image, the application will display the word *Two* in a message box.
- When the user clicks the 3 image, the application will display the word *Three* in a message box.
- When the user clicks the 4 image, the application will display the word *Four* in a message box.
- When the user clicks the 5 image, the application will display the word *Five* in a message box.

### Group 3/9 Problem – Card Identifier

Using some of the images files provided in the folder *Group 3 Images*, create an application with five Image/Button controls. Each Image/Button should display a different card from the set of images. When the user clicks any of the Image/Button controls, the name of the card should be displayed in a Label control. The Label control should be blank at program start up.

## Group 4/10 Problem – Joke and Punch Line

A joke typically has two parts: a setup and a punch line. For example, this might be the setup for a joke:  
*How many programmers does it take to change a light bulb?*

And this is the punch line:  
*None. That's a hardware problem.*

Think of your favorite joke and identify its setup and punch line. Then create an application that has a Label and two buttons on a form. One of the buttons should read “Setup” and the other button should read “Punch Line”. When the *Setup* button is clicked, display the joke’s setup in the Label control. When the *Punch Line* button is clicked, display the joke’s punch line in the Label control.

## Group 5/11 Problem – Heads or Tails

Using the image files provided in the folder Group 5 Images, create an application with a ‘Show Heads’ button and a ‘Show Tails’ button. When the user clicks on the ‘Show Heads’ button, an image of the heads side of a coin should appear. When the user clicks the ‘Show Tails’ button, an image of the tails side of the coin should appear.

## Group 6/12 Problem – Orion Constellation

Orion is one of the most famous constellations in the night sky. Using the image provided in the folder Group 6 Images, create an application that displays the Orion image in a Image/Button control. The application should have a button that, when clicked, displays the names of each of the stars. The application should have another button that, when clicked, hides the star names. The names of the stars are (left to right, top to bottom): *Betelgeuse, Meissa, Alnitak, Alnilam, Mintaka, Saiph, and Rigel*.