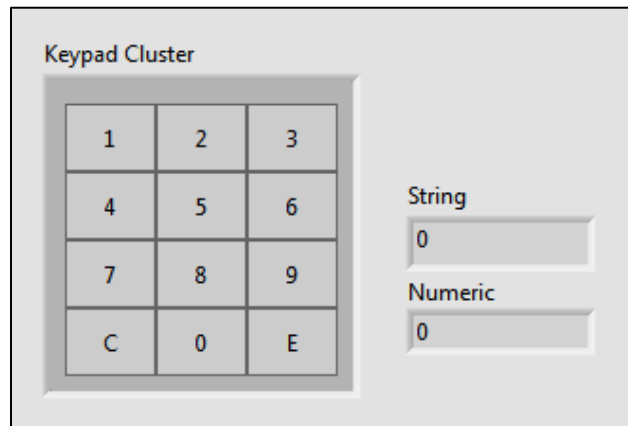# CLD Exercise 17: GUI Keypad Simulation

Objective

Develop a VI that simulates a keypad using the given application front panel (Figure 1).

Figure 1. Application Front Panel

General Operation

The VI must continuously run until the **E** key is pressed. While the VI is running, the **String** indicator must display the number. When the **C** key pressed, the **String** indicator must clear any numbers and display 0. When the **E** key is pressed, the number in the **String** indicator must be converted to a numeric value and displayed in the **Numeric** indicator.

For example: if keys 5678 are consecutively pressed, the **String** indicator must display 5, then 56, then 567 and finally 5678.

Application Terminology

Keypad	Cluster of Booleans
String	String indicator
Numeric	Numeric indicator

Initialization

The application must initialize as shown in Figure 1, and the front panel controls and indicators must be in the following states.

- **String:** Set to 0
- **Numeric:** Set to 0

Questions

How would the solution application change if the Boolean Text of the button was used to indicate the button pressed?