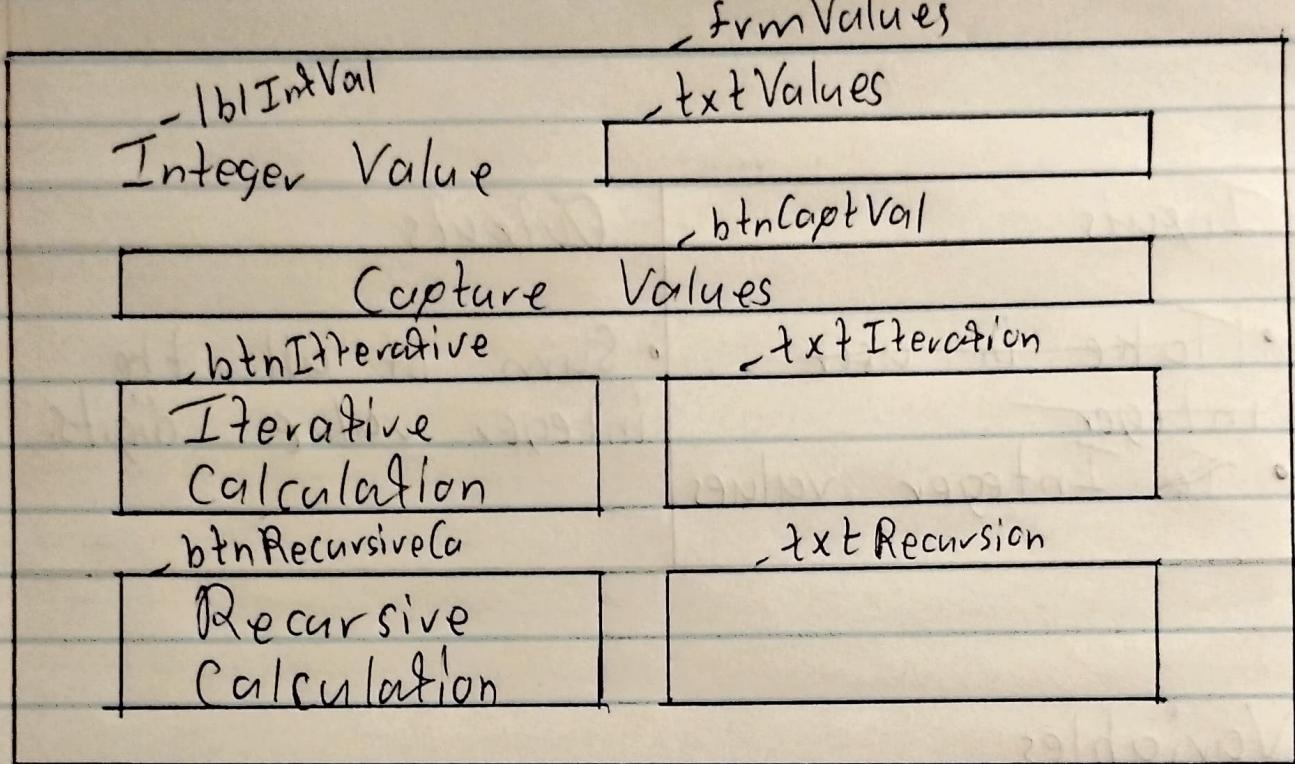# Design

Inputs	Outputs
• ~~Take in user integer~~ • ~~Ta~~ Integer values	• Sum of all the integer value digits.

Variables

- Value - Integer
- DigitSum1 - Integer
- DigitSum2 - Integer

Events	Actions
btnCastVal is clicked	• Take in user integer values
btnItteration is clicked	• Use iterative calculation to calculate digit Sum and display answer in text box
btnReavsion is clicked	• Use recursive calculation to calculate digit sum and display in text box.

Interface

frmValues

lbl IntVal	txt Values
Integer Value	btnCaptVal

Capture Values

btnItterative	txtIteration
Iterative Calculation	

btnRecursiveCa	txtRecursion
Recursive Calculation	

Algorithm

1. Take in integer value inputs
   1. Value ← integer value
   2. If value is negative then value ← Value x -1
2. Iterative Calculation of digits sum
3. Display sum1 of digits
   1. DigitSum ← Sum of all digits
   2. Iteration.Text ← DigitSum1
4. Recursive calculation of digits sum
5. Display sum of digits
   1. DigitSum2 ← Sum of all digits
   2. Recursion.Text ← Digit Sum 2