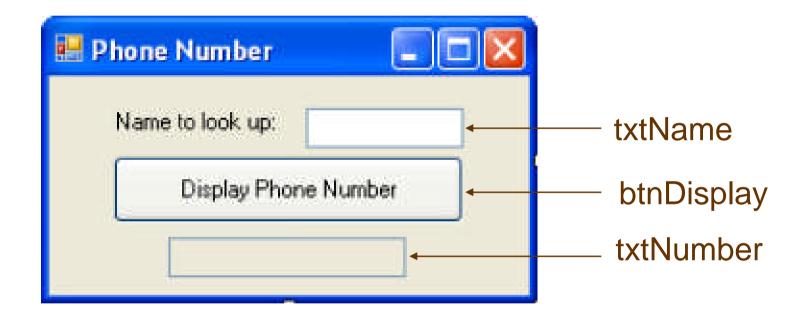


# Processing Lists of Data with Do Loops (Examples)

- 1. Phone Book Enquiry (Lab sheet 6.3) (Using Peek Method)
- 2. Find the sum of a series of number. (Using Counters and Accumulators)
- 3. Password Checking –(Using Flags)
- 4. Nested Loops (Lab sheet 6.6)



## Lab sheet 6.3: Phone Number Enquiry



First, build the Form with the above layout



#### What is sr.Peek?

- Sr.peek is the result of reading the text file.
- It will return the next character, if not available, it will return -1.

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# Lab sheet 6.3 : Phone Book Enquiry (Using Do-While Loop)

```
Do While (name <> txtName.Text) _
And (sr.Peek <> -1)
name = sr.ReadLine
phoneNum = sr.ReadLine
Loop
```

As long as the name being searched for has not been found AND the end of the file has not been reached, the loop will continue

This make sure there is some text remains in the text file for the program to read.

## **Example: Phone Book Enquiry** (Using Do ... Loop Until)

#### Do

```
name = sr.ReadLine
  phoneNum = sr.ReadLine
Loop Until (name <> txtName.Text) _
 or (sr.Peek <> -1))
```

Until the name being searched matches the data OR the end of the file has been reached, the loop will Stop

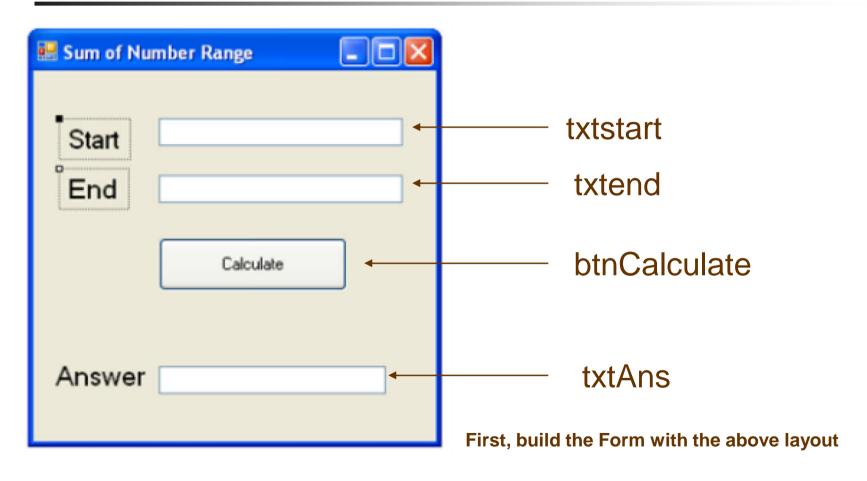


### Counters and Accumulators

- A counter is a numeric variable that keeps track of the number of items that have been processed.
- An accumulator is a numeric variable that totals numbers.
- In the following example, variable
   <u>CurrNum</u> is a counter while <u>Ans</u> is a accumulator.



# Lab sheet 6.4: Find the sum of a series of number (Using Do-While Loop)





#### Sum of a series of number - Partial Code

Dim EndNo As Double
Dim Ans As Double
Dim CurrNum As Double
CurrNum = txtStart.Text
EndNo = txtEnd.Text
Ans = 0
Do While CurrNum <= EndNo
Ans = Ans + CurrNum

CurrNum is a counter, it increases by 1 each time through the loop

Ans
is an
accumulator.
It is
used to
total up
the
values.

Ans = Ans + CurrNum

CurrNum = CurrNum + 1

Loop

txtAns.Text = Ans

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