Assignment #5 – User Defined Procedures and File I/O

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COURSE NO: PROG8240

COURSE NAME: STRUCTURED PROGRAMMING

```
1 Imports System.IO
 2 Public Class Form1
        'Declaration of string and streamreader varible
 4
       Dim myArray() As String
       Dim srMeasure As StreamReader
 6
        'Function to calculate the Maximum size
 7
 8
       Function CalcMaxsize() As Double
 9
            'Declaration of varibles
            Dim nominalSize, upperSize, upperTol As Double
10
11
            nominalSize = CDbl(txtNominalSize.Text)
12
13
            upperTol = CDbl(nudUpperTol.Text)
14
15
            'Processing
            upperSize = nominalSize + upperTol
16
17
            'return value to the call function
18
19
            Return upperSize
20
       End Function
21
22
        'Function to calculate the Maximum size
23
       Function CalcMinsize() As Double
24
            'Declaration of varibles
25
26
            Dim nominalSize, lowerSize, lowerTol As Double
            nominalSize = CDbl(txtNominalSize.Text)
27
28
            lowerTol = CDbl(nudLowerTol.Text)
29
30
            'Processing
            lowerSize = nominalSize + lowerSize
31
32
33
            'return value to the call function
34
            Return lowerSize
       End Function
35
36
        'Procedure to clear the list box
37
38
       Sub clearlist()
39
            LstScap.Items.Clear()
40
            LstRework.Items.Clear()
41
            LstAccpeted.Items.Clear()
42
       End Sub
43
44
       Private Sub btnMeasurement_Click(sender As Object, e As EventArgs) Handles →
          btnMeasurement.Click
45
            'declaring the varible
46
47
            Dim FilePath As String
48
```

```
C:\Users\aksha\Desktop\A5_SPC_PartsAnalysis_athomas5161\Form1.vb
                                                                                       2
49
             'calling the clear list function
50
             clearlist()
51
 52
             'assigning the path to the varible
53
54
             FilePath = "C:\Users\aksha\OneDrive - Conestoga College
                                                                                       P
               \Measurements.txt"
55
             srMeasure = File.OpenText(FilePath)
56
             'calling the sort part procedure
57
58
             Sortpart()
59
60
             'closing the file
61
             srMeasure.Close()
62
             srMeasure.Dispose()
63
64
        End Sub
65
         'sortpart procedure
66
67
        Sub Sortpart()
68
             'declaration of the varible
69
70
             Dim MaxSize, MinSize, PartSize As Double
71
72
             'calling CalcMaxsize and CalcMinsize function
73
             MaxSize = CalcMaxsize()
             MinSize = CalcMinsize()
74
75
             Do While srMeasure.EndOfStream = False
76
77
                 'spliting and storing the value to the array
78
                 myArray = srMeasure.ReadLine().Split(",")
79
                 PartSize = Double.Parse(myArray(1))
80
                 'checking the condtions for the various size and diplay the value
81
                   to the list box
82
                 If PartSize < MinSize Then</pre>
                     LstScap.Items.Add("(" & myArray(0) & ") " & myArray(1) & " mm")
83
84
                     LstScap.Items.Add(vbCrLf)
85
86
                 ElseIf PartSize > MaxSize Then
                     LstRework.Items.Add("(" & myArray(0) & ") " & myArray(1) & "
87
                       mm")
88
                     LstRework.Items.Add(vbCrLf)
89
                Else
90
                     LstAccpeted.Items.Add("(" & myArray(0) & ") " & myArray(1) & " >
91
92
                     LstAccpeted.Items.Add(vbCrLf)
93
                 End If
```

```
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                                                                                        3
 94
 95
 96
 97
             Loop
 98
         End Sub
 99
         'when Quit button is pressed program closes
         Private Sub btnQuit_Click(sender As Object, e As EventArgs) Handles
100
           btnQuit.Click
101
             Me.Close()
         End Sub
102
103 End Class
```

104