

```
'Lets redim the array to add 2 more columns for wind shear and moments
ReDim Preserve StemArray(counter, 6)

'Set up Some Variables to use in the loop
Dim POI_Stem(2) As Double
Dim PointX As Double

'Loop through all my wall points and calculate shear and moments due to wind load
For i = LBound(StemArray, 1) To UBound(StemArray, 1)

    PointX = StemArray(i, 4)

    POI_Stem = Stem_Wind(PointX, POI_Special, h_topfence, h_parapet, pressure_wind)
    StemArray(i, 5) = POI_Stem(1)
    StemArray(i, 6) = POI_Stem(2)
Next i
```

I get an error  
here..."can't assign to  
array"

POI\_Special is a 7x4  
variant matrix

```

Function Stem_Wind(PointX As Double, POI_Special() As Variant, h_topfence As Double, _
h_parapet As Double, pressure_wind As Double) As Double()
'
' This function will calculate shear and moments due to a uniform wind load
'
'
'      Written by JoelTxCIVE
'
'
'      Last Modified 07/10/2018
'

'INPUT:
'For each value sent into the function, we need to determine which region of the wall
'we are in and then apply the proper equation to determine shear and moments.
'
'PointX      -      This is the point I am interested in.
'POI_Special() -      This is a (7x4) variant matrix with string and numeric columns
'h_topfence  -      Height of top of fence above wall
'h_parapet   -      Height of parapet region
'pressure_wind -      Uniform wind pressure
'

'OUTPUT:
'A (1x2) array containing two numeric values.  Value 1 will be shear and Value 2 is moment.

'We are going to use a select case operation to compare the PointX value
'to the special points of interest array.

Select Case PointX

    Case Is < POI_Special(3, 4)                'in the top fence
        Stem_Wind(1) = 0 'shear
        Stem_Wind(2) = 0 'moment

    Case Is = POI_Special(3, 4)                'at top of wall
        Stem_Wind(1) = h_topfence * pressure_wind 'shear
        Stem_Wind(2) = Stem_Wind(1) * h_topfence / 2 'moment

    Case Is < POI_Special(4, 4)                'between top of wall and nat grade
        Stem_Wind(1) = (h_topfence + PointX - POI_Special(3, 4)) * pressure_wind 'shear
        Stem_Wind(2) = Stem_Wind(1) * PointX / 2 'moment

    Case Is <= POI_Special(7, 4)              'below nat grade
        Stem_Wind(1) = (h_topfence + h_parapet) * pressure_wind 'shear
        Stem_Wind(2) = Stem_Wind(1) * (PointX - (h_topfence + h_parapet) / 2) 'moment

    Case Else
        Stem_Wind(1) = 0 'nothing
        Stem_Wind(2) = 0 'nothing
End Select

End Function

```