

Introduction to Programming using Visual Basic
CS0004
Pop Quiz 3

Name _____

Pitt ID _____

Instructions: You have 15 minutes to answer these questions as clearly and precisely as you can. Good Luck!

1. What will be the output of the following program when the button is clicked?

```
Private Sub btnDisplay_Click(...) Handles btnDisplay.Click
    Dim word, result As String
    word = "Benjamin"
    result = Rotate(word)
    result = Rotate(result)
    result = Rotate(result)
    txtBox.Text = result
End Sub

Function Rotate(ByVal var As String) As String
    Dim varlength As Integer
    varlength = var.Length
    Return var.Substring(1) & var.Substring(0, 1)
End Function
```

First Call:

"enjaminB"

Second Call:

"njaminBe"

Third Call:

"jaminBen"

2. Write a function that subtracts 1 from an integer (passed into the function as a parameter) and returns the subtracted value (which is also an integer). Name the function *SubOne*.

```
Function SubOne(ByVal var As Integer) As Integer
    Return var - 1
End Function
```

3. Assume you have the following function

```
Function SumArray(ByVal anyArray() As Double) As Double
    Dim total As Double
    total = 0
    For i As Integer = 0 To anyArray.GetUpperBound(0)
        total += anyArray(i)
    Next
    Return total
End Function
```

a) What would the value be for x after these lines:
`Dim theArray() As Double = {8,2,9,1.5}`
`Dim x As Double = SumArray(theArray)`

$$8+2+9+1.5 = \mathbf{20.5}$$

b) What would the value be for x after these lines:
`Dim theArray() As Double = {1.5,0.5,2.5}`
`Dim x As Double = SumArray(theArray)`

$$1.5+0.5+2.5 = \mathbf{4.5}$$

c) What would the value be for x after these lines:
`Dim theArray() As Double = {}`
`Dim x As Double = SumArray(theArray)`

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