Visual Basic   Name -
Ch. 4 Worksheet #15

                                                                Period –

Trace all variables and show the output displayed in `lblResult` in the following code segments. Show the final value of each variable and the final value of each element of `mintScores`. Assume `mintScores` represents 10 grades on an exam worth 100 points & is declared as a module level array with the statement

```
Dim mintScores() As Integer = {54, 82, 90, 77, 92, 68, 59, 89, 83, 77}
```

1.
```
Dim intMin As Integer = 100
For I = 0 to 9
      If (mintScores(I) < intMin) Then
            intMin = mintScores(I)
      End If
Next

lblResult.Text = intMin.toString()
```

Why was `intMin` initialized to 100 rather than zero?

2.
```
Dim intMax As Integer = 0

For I = 1 to 9 Step 2
      If (mintScores(I) > intMax) Then
            intMax = mintScores(I)
      End If
Next

lblResult.Text = intMax.toString()
```


3.
```
Dim intNum As Integer = 0

For I = 0 to 9
      If (mintScores(I) < 70) Then
            intNum = intNum + 1
      End If
Next

lblResult.Text = intNum.toString()
```

4.
```
Dim intNum1 As Integer = 0
Dim dblNum2 Ad Double = 0.0

For I = 0 to 9
      If (mintScores(I) > 60) Then
            intNum1 = intNum1 + mintScores(I)
      End If
Next

dblNum2 = Math.Round(intNum / 10)
lblResult.Text = dblNum2.toString()
```

5.
```
Dim intKey As Integer = 77
Dim intNum As Integer = 0

For I = 0 to 9
      If (mintScores(I) = intKey) Then
            intNum = intNum + 1
            Exit For
      End If
Next
```

6. In this exercise, trace the values in `mintScores`.

```
For I = 0 to 9
      If (mintScores(I) Mod 2 = 0) Then
            mintScores(I) = mintScores(I) + 1
      Else
            mintScores(I) = mintScores(I) - 2
      End If
Next

lblResult.Text = mintScores(3).toString()
```

7. In this exercise, trace the values in `mintScores`.

```
Dim intNum As Integer = 0
Dim I as Integer = 0

For I = 0 to 9
      If (mintScores(I) > 70 Or mintScores(I) < 80) Then
            mintScores(I) = 0
      End If

      intNum += mintScores(I)
Next

lblResult.Text = intNum.toString()
```