**Tutorial # 6**

**Question#1:** What is the output of the following codes?



1 Dim numbers() As Double = {10,20,30,40,50,60}

2 Dim length As Integer = numbers.Length - 1

3 Dim tempArray(length) As Integer

4

5 For i As Integer = length To 0 Step -1

6 tempArray(length - i) = numbers(i)

7 Next

What is the content of the array tempArray?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Element Index | 0 | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  |  |  |  |  |  |
| Value | 60 | 50 | 40 | 30 | 20 | 10 |  |  |  |  |  |  |  |  |  |  |

What is the output of the following functions?

|  |  |
| --- | --- |
| tempArray.Count | 6 |
| tempArray.Length | 6 |
| tempArray.Max | 60 |
| tempArray.Min | 10 |
| tempArray.First | 60 |
| tempArray.Last | 10 |
| tempArray.GetUpperBound(0) | 5 |
| tempArray.GetLowerBound(0) | 0 |
| tempArray.Average | 35 |
| tempArray.Sum | 210 |

1 Dim prices(1, 11) As Integer

2

3 prices = {{20,10,15,13,11,5,33,17,24,9,1,6},{22,10,17,20,12,15,13,29,12,9,8,14}}

5

6 Dim result(11) As Integer

7

8 For i As Integer = 0 To 11

9 result(i) = prices(1, i) - prices(0, i)

10 Next

What is the content of the array result?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Element Index | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |  |  |  |  |
| Value | 2 | 0 | 2 | 7 | 1 | 10 | -20 | 12 | -12 | 0 | 7 | 8 |  |  |  |  |

1. Trace the following code

Dim states() As String = {"Asma", "Bodoor","Sara","Rana"}

Dim orderedFlag As Boolean = True

For i As Integer = 0 To states.Count - 2

If states(i + 1) < states(i) Then

orderedFlag = False

End If

Next

If orderedFlag Then

txtOutput.Text = "YES"

Else

txtOutput.Text = "NO"

End If

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| i | states(i) | states(i + 1) | orderedFlag | txtOutput.Text |
| 0 | Asma | Bodoor | True | - |
| 1 | Bodoor | Sara | True | - |
| 2 | Sara | Rana | False | - |
| 3 |  |  |  | No |