

Answer the following exercises **and trace the variables** using the following arrays. Write "error" if an error would occur.

```
Dim mNums() As Integer = {1, 1, 3, 2, 3, 4, 5, 3, 2, 3, 2}
```

```
Private Sub Form1_Load(. . .)
    Label1.Text = 5 + mNums(6)           1. _____
    Label2.Text = mNums(5) + mNums(6)   2. _____
    Label3.Text = mNums(5 + 6)          3. _____
```

```
Dim partialSum As Integer = 0           J           partialSum
Dim J As Integer = 2
```

```
For J = 2 To 4
    partialSum += mNums(J)
Next
```

```
Label4.Text = partialSum                4. _____
```

```
Dim partialTotal As Integer = 0         J           partialTotal
```

```
For J = 0 To 6 Step 3
    partialTotal += mNums(J)
Next
```

```
Label5.Text = partialTotal              5. _____
```

```
Dim countEvens As Integer = 0          J           countEvens
```

```
For J = 0 To mNums.Length() - 1
    If (mNums(J) Mod 2 = 0) Then
        countEvens += 1
    End If
Next
```

```
Label6.Text = countEvens                 6. _____
```

```
Dim mCounts() As Integer = {0, 0, 0, 0, 0, 0}   J
' trace the elements of mCounts here----->
```

```
For J = 0 To mNums.Length() - 1
    mCounts(mNums(J)) = mCounts(mNums(J)) + 1
Next
```

```
Label7.Text = mCounts(0)                 7. _____
```

```
Label8.Text = mCounts(1)                 8. _____
```

```
Label9.Text = mCounts(2)                 9. _____
```

```
Label10.Text = mCounts(3)                10. _____
```

```
Label11.Text = mCounts(4)                11. _____
```

```
Label12.Text = mCounts(5)                12. _____
```

End Sub

13. Explain the pattern or purpose of the algorithm that produces answers to exercises #8-12.