

IST 256
Lab Week 13 – November 23, 2009

There is only one lab this week and you do not have to hand it in.

1. Understanding a Two-dimensional Array Program

Suppose that we have a two-dimensional array that was read in from the file. Shown here is the declaration of the array and how it would look after the file is read:

```
Dim numbers(0 To 5, 0 To 2) As Integer
```

<i>numbers</i>	Column 0	Column 1	Column 2
Row 0	7	3	-7
Row 1	2	6	9
Row 2	3	-20	17
Row 3	4	10	3
Row 4	5	2	4
Row 5	6	9	1

a. Write an expression that will give the array element in Row 2, Column 1:

What is the value of this element?

b. Here is a code fragment that shows a nested loop that iterates over every element of the array.

```
Dim total as Integer
```

```
Label1.Text = ""
```

```
For row = 0 to 5
```

```
    total = 0
```

```
    For col = 0 to 2
```

```
        total = total + numbers(row,col)
```

```
    Next
```

```
    Label1.Text = Label1.Text & "Sum over " & row & "= " & total & vbCrLf
```

```
Next
```

Given the values in the numbers array, what will the value of Label1.Text be during the first iteration of the outermost loop, when row = 0?

What are the remaining values given in the Label?