



*Result from VB6 code*  
1716 1752

Figure 6. VSGuard results for the two input arrays, showing that VB6 and V arrays are identical.

Establishing that the program input is identical it becomes apparent that the error is occurring somewhere in the matrix multiplication code itself. Scanning the matrix multiplication code we find one line where the `results` array is assigned a value (Figure 7).

```
result(countx, county) = MatMultElement(arr1, arr2, countx,  
county)
```

Figure 7. Line of code in the VB.NET version where `result` is assigned a value.

To determine why `result` is being assigned the wrong value we place the assertion on the variables `result`, `arr1` and `arr2`. This line of code is within a number of loops so we expect the assertion to fire multiple times.

After the first iteration the `result`





**Appendix II – Subset of VB .NET code just after incomplete update to zero bound arrays**

```
Private Sub MatrixMult(ByRef arr1(,) As Integer,  
                      ByRef arr1(,) As Integer,
```