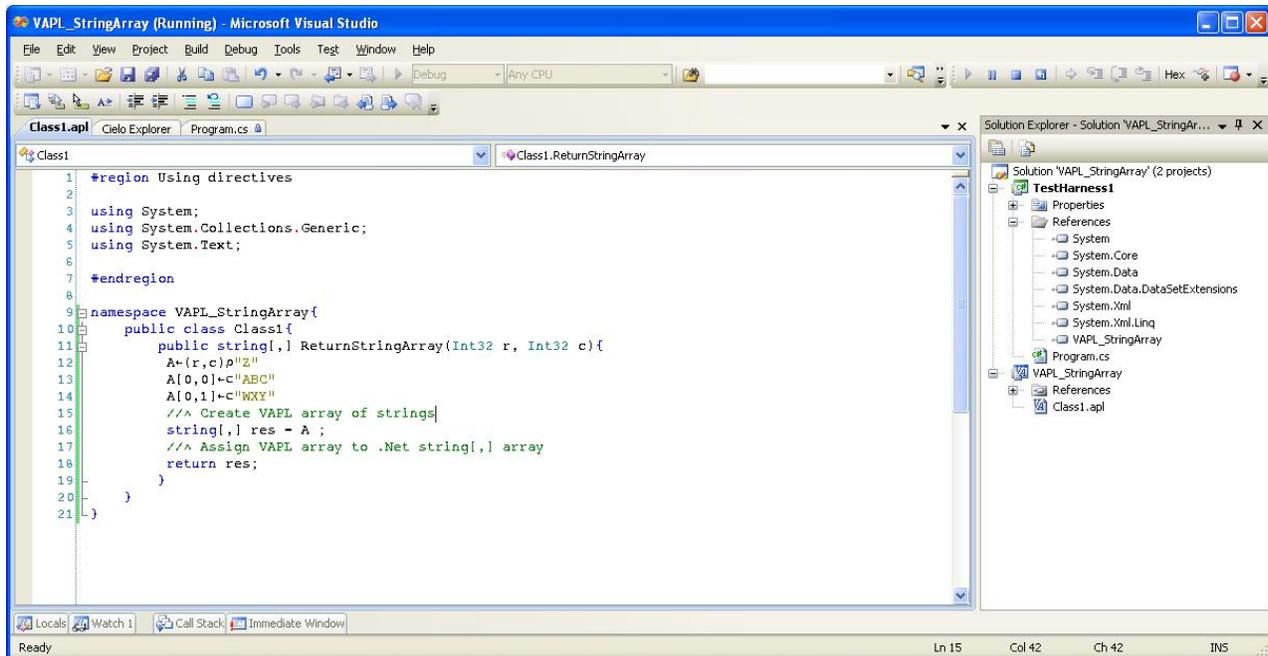


Implicit Cast of a VisualAPL Array of String Vectors to a .Net string[,] Array

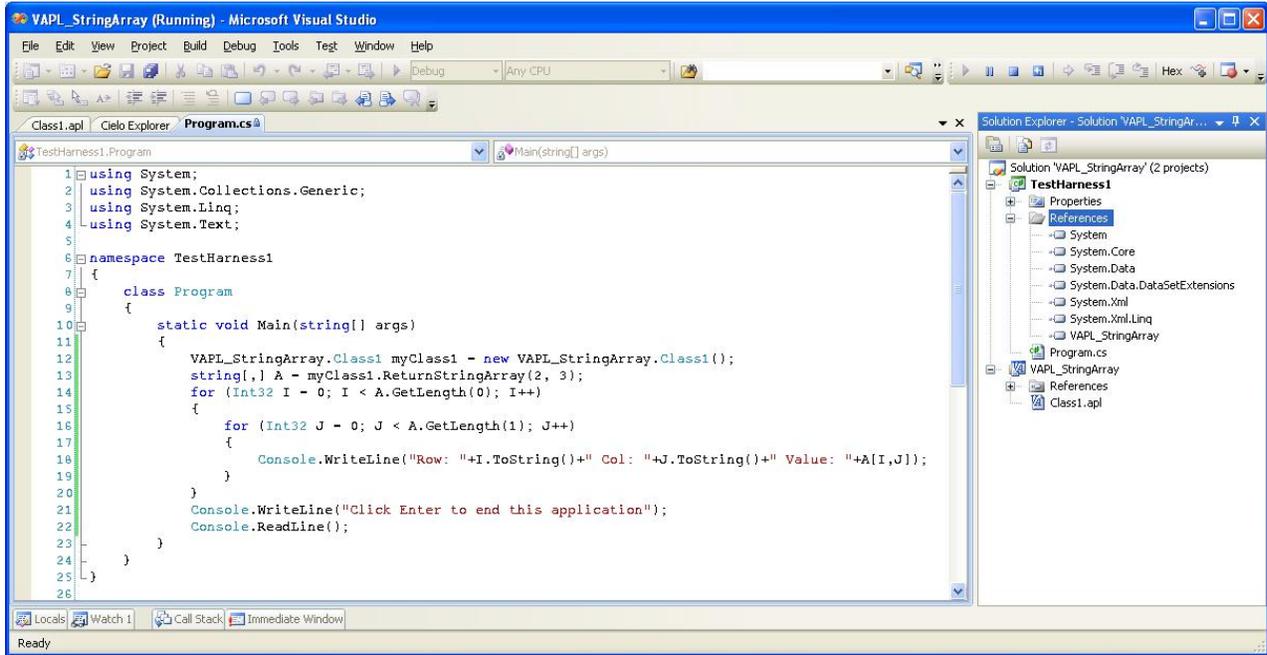
In this sample solution a VisualAPL class library containing the public Class1 class containing the public ReturnStringArray(,)method creates a VisualAPL cvar (Cielo dynamically-typed) APL array of strings and then returns this array as a .Net string[,] array datatype using an implicit cast from cvar to string[,].

Below is the VisualAPL class library source code. Notice that no explicit cast from cvar to string[,] is necessary on line [16] of the ReturnStringArray(,) method.



```
1 #region Using directives
2
3 using System;
4 using System.Collections.Generic;
5 using System.Text;
6
7 #endregion
8
9 namespace VAPL_StringArray{
10     public class Class1{
11         public string[,] ReturnStringArray(Int32 r, Int32 c){
12             A←(r,c)ρ"Z"
13             A[0,0]←C"ABC"
14             A[0,1]←C"WXY"
15             //^ Create VAPL array of strings
16             string[,] res = A ;
17             //^ Assign VAPL array to .Net string[,] array
18             return res;
19         }
20     }
21 }
```

Below is the C# console project ('test harness') which references the VisualAPL class library namespace ('VAPL_StringArray'), creates an instance of the 'VAPL_StringArray.Class1' class called 'myClass1' and executes the 'myClass1.ReturnStringArray(,)' method to obtain a result of string[,] datatype. The remainder of the console project iterates through the elements of the string[,] array and displays them to the console window.



When this project is run, the output is illustrated below:

