

c-sharp

HW #5

Write a C# program that does the following operations:

1. `int WordsCount(string[])`

This function receives a string and returns the number of words in it. The number of words in a string can be derived from the number of spaces in that string.

2. `void ConvertToUpper(char[])`

This function takes a string and converts it to upper case

Hint: use these functions from the `string.ToUpper()`

3. `void Read2DArray(int[,] , int r , int c)`

This function reads the elements of the 2D array from the user.

4. `void Print2DArray(int[,] , int r , int c)`

This function prints the elements of the 2D array to the screen.

5. `void Transpose(int[,] a , int r , int c , int[,] t)`

This function computes the transpose (t) of the array (a). An array transpose is done by replacing the array's rows with columns and vice versa.

6. `void PrintTrasposedArray(int[,] , int r , int c)`

This function prints the elements of the 2D array to the screen.

Hint : r : row , c : Column.

■ **In main :**

- ☐ Define rows = 5
- ☐ Define cols = 3
- ☐ Define local array of char (string) and give it an initial value.
- ☐ Define local 2D int 5x3 array.
- ☐ Test your functions in the main program. A menu-driven program with the following menu could be implemented for this purpose.

1. Words count

2. Convert Sentence to Upper

3. Read 3x5 array

4. Print 5x3 array

5. Array Transpose

6. Print Transposed Array