**PE-8 – More About Variables**

**Due Saturday 5-Sep-2019 by 11:59pm**

* Which of the following conversions can't be performed implicitly:
* int to short: Cannot be preformed implicitly.
* short to int: Works
* bool to string: Cannot be preformed implicitly.
* byte to float: Works
* Give the code for a color enumeration based on the short type containing the colors of the rainbow plus black and white. Can this enumeration be based on the byte type?

Yes it can. No errors occured when I ran the code.

* Write the C# code that creates an array of doubles with a size of 4 and assigns values to the array. The identifier should be *precipitation* and the values are 0.45, 2.78, 0.04 and 1.22.

double[] percipitation = new double[4];

percipitation[0] = 0.45;

percipitation[1] = 2.78;

percipitation[2] = 0.04;

percipitation[3] = 1.22;

* Complete the *for* loop to assign values into the array. When the loop is finished running, the array should hold the values 1, 2, 3, 4, 5.

int[] ascendingNumbers = new int[5];

for( int i = 0; i < ascendingNumbers.Length; i++ )

{

ascendingNumbers[i] = i + 1;

}

console will output:

1

2

3

4

5

* Given the formula z = 3y2 + 2x - 1 write a console application to calculate z for the following ranges of x and y:
* -1 <= x <= 1 in 0.1 increments
* 1 <= y <= 4 in 0.1 increments

Use a 3-dimensional array double[,,] to store the values of x, y and z for each computation.

GitHub project URL:

I had a challenging time with this and was unable to find a solution unfortunately.

* Will the following code compile? If not, why not? Hint: there are 3 errors.

string[] blab = new string[5];

string[5] = 5th string;

This will not compile for 3 reasons.

1. Not referencing the actual array created. You use string to identify a variable type not as the array name itself.

2. Being that this array holds strings, making the 5th element = to '5th string' without quotation marks will create an error.

3. Finally array at [5] is out of bounds. Since arrays are indexed starting at 0, the final index you could access for this array would be 4.

* Write a console application that accepts a string from the user and outputs a string with the characters in reverse order.

GitHub Project URL:

<https://github.com/jag8932/myIGME-201/tree/master/PE8_Question7_Goodwillie>

* Write a console application that accepts a string and replaces all occurrences of the string "no" with "yes".

GitHub Project URL: <https://github.com/jag8932/myIGME-201/tree/master/PE8_Question8_Goodwillie>

* Write a console application that places double quotes around each word in a string.

GitHub Project URL: <https://github.com/jag8932/myIGME-201/tree/master/PE8_Question9_Goodwillie>

***Submission***

Upload this completed document to the corresponding MyCourses dropbox.

Add, Commit and Push the 4 projects for #5, 7, 8, and 9