# PE-8 – More About Variables

1. Which of the following conversions can't be performed implicitly:
2. int to short
3. short to int
4. bool to string
5. byte to float
6. 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?
7. 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.
8. 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++ )

1. 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.

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

string[] blab = new string[5];

string[5] = 5th string;

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

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1. Write a console application that accepts a string and does a case-insensitive replacement of all occurrences of the **word** "no" with "yes".

For example, the string:

She said, "No, I have nothing in my purse!"

Should be converted to:

She said, "Yes, I have nothing in my purse!"

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

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