Homework 10, ISTA-220

Chapter 10, C# Step by Step July 28, 2018

1 Homework

Readings 1.1

Read chapter 10, pages 221 - 242 in the C # Step by Step book.

1.2 **Discussion Questions**

Answer the discussion questions in writing.

- 1. What does an array look like in memory?
- 2. Where is memory allocated to hold an array, on the stack or on the heap?
- 3. Where is memory allocated to hold an array reference, on the stack or on the heap?
- 4. Can an array hoold values of different types? This is a trick question, the answer is, "It depends."
- 5. Describe the syntax of the condition or a *foreach* loop.
- 6. How do you make a deep copy of a array?
- 7. What is the difference between a multi-dimensional array and an array of arrays?
- 8. How do you "flatten" a multidimensional array? In other words, take something that looks like a

matrix
$$\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$
 and turn it into an array $[1, 2, 3, 4, 5, 6, 7, 8, 9]$?