HW 1B - C# 02 - Variables and Identifiers

What is a statement?

- a command that performs an action

Citation: Microsoft Visual C#

What is an identifier?

-the name you assign to a type, member, variable, or namespace.

<https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/inside-a-program/identifier-names>

What is a variable?

-Containers

Are primitive types and value types the same thing?

-primitive types are defines at the programming language, and are inherent to the language.

-value types contain numbers.

How are arithmetic operators and variable types related?

-In a way yes. The variable type will dictate what can and cannot be done to the variable. For example, the Boolean values TRUE and FALSE cannot be added together. However:

a=1

b=1

a + b = 2

is valid, because int type variables can apply arithmetic operators.

How do you turn an integer into a string? How do you turn a string into an integer?

-Turn an integer into a string by Convert.ToString Method.

Citation: https://docs.microsoft.com/en-us/dotnet/api/system.convert.tostring?view=netcore-3.1

-Turn a string into an integer by parse of convert methods.

Citation: https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/types/how-to-convert-a-string-to-a-number

What is the difference between precedence and associativity?

-Precedence determines which arithmetic operator goes first.

-Associativity occurs when two arithmetic operators of the same precedence are in the same statement. Can be left or right associative.

Citation: Microsoft Visual C#

How are the prefix and postfix increment and decrement operators evaluated differently?

-Whether they come before or after the variable doesn’t matter. “Count++” and “++count” evaluate to the same answer.

Citation: Microsoft Visual C#

What is string interpolation?

-A more efficient concatenation method that allows for statements like ($”Hello {username}”);

-It can read the “{}” field from the contained variable name.

What does the var keyword do?

-Var is used to declare implicitly typed variables.

<https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/var>