Introduction to Variables

Things you should have learned from the reading

- C# data types
- Variable declaration syntax in C#
- Naming variables in C# (Rules)
- Assigning values to C# variables
- Using post-fix letters with variable constants

C# Data Types

- Integer
- Real number
- Alphanumeric
- Boolean

C# Data Types

- Integer
  - Byte (1 byte)
  - Short (2 bytes)
  - Int (4 bytes)
  - Long (8 bytes)
- Real number
- Alphanumeric
- Boolean

C# Data Types

- Integer
- Real number
  - Float (4 bytes)
  - Double (8 bytes)
  - Decimal (16 bytes)
- Alphanumeric
- Boolean

C# Data Types

- Integer
- Real number
- Alphanumeric
  - Char (2 bytes)
  - String (? bytes → depends on length of string)
- Boolean

C# Data Types

- Integer
- Real number
- Alphanumeric
- Boolean
  - Bool (1 byte)

Variable Declaration

Syntax:

[C# variable data type] [variable name];

Examples:

```
int PhilippinePopulation;
float Grade;
string Fullname;
bool Graduating;
```

Naming variables in C#

1. First letter of the variable name must begin with a letter or underscore.
2. Variable names must not have special characters
3. Variable names must not be reserved words

Assigning variables in C#

- Use the assignment operator (=) to assign values to a declared variable.

Examples:

```
PhilippinePopulation = 72000000;
Fullname = “Eisen Sy”;
```

Post-fix Letters in Variable Assignment

- Some variable data types in C# makes use of post-fix letters to assign constant values to them.
- These data types include:
  - Long (L)
  - Float (F)
  - Decimal (M)

Post-fix Letters

Examples:

```
long x = 1000000000L;
float Pi = 3.14159F;
decimal y = 9999.999M;
```