**Training Day 1**

* C# is a strongly typed language
* Explicit Declaration of Decimal = M, Double = D, Float = F. Use as a suffix.
* .Net Core – collection of languages
* Use Camel Case in declaring of variables, while in Class, Properties, Functions, use Pascal Case
* ArrayList is equivalent to object when you access the elements explicit cast needed, Unlike the generic list.
* Modifiers
  + Private - can be used only in the same enclosing class
  + Public - You can use it anywhere.
  + Internal – Can be used only in the same project (assembly).
  + Protected –
  + Protected Internal – same assembly and same inheritance tree
  + Private Protected –
* Default access modifier of class is internal, and private for class member.
* && and || = short – circuited
* Namespaces – logical collection of classes
* Dynamically typed languages doesn’t have data types, it is determined on runtime. Doesn’t have compile error
* Strongly typed or statically typed languages you need to declare specific type of data. Has compile time error

**OOP**

* Class is the blueprint, instance is the class
* Constructor has no return type
* Constructor Overloading: same constructor name but different signatures (parameter)
* Stack = Value type, Heap = Reference Type. Object pointer is on the stack, but the actual object is on the heap.
* Class Members
  + Fields
  + Properties
  + Methods
  + Constructors
* Static class cannot be instantiated. Just use for constant like Pi.
* Sealed – cannot be inherit
* Abstract – can be used as a base class only and cannot be instantiated