

# Programming C# 6, Part 04 of 12: Variables and Data Types

page 1

**Meet the expert:** Don Kiely is a featured instructor on many of our SQL Server and Visual Studio courses. He is a nationally recognized author, instructor, and consultant specializing in Microsoft technologies. Don has many years of teaching experience, is the author or co-author of several programming books, and has spoken at many industry conferences and user groups. In addition, Don is a consultant for a variety of companies that develop distributed applications for public and private organizations.

**Prerequisites:** This is an entry level course. Some amount of programming experience will be helpful and speed up your learning but you can jump right into this course at any level.

**Runtime:** 01:52:15

**Course description:** Variables and data types are a core feature of any programming language, and you'll learn about them in this course. You'll see how to name, declare, and initialize variables, as well as a way to let the compiler determine the appropriate data type, and why you may or may not want to do that. Then you'll learn about many of the built-in data types provided by C# and the .NET Framework, letting you manage just about any kind of data in memory. The course wraps up with a look at three advanced types: constants, enumerations, and structures.

## Course outline:

### Variables

- Introduction
- Introducing Variables
- Naming Variables
- Declaring Variables
- The var Keyword
- Demo: var Keyword
- The var Keyword Cont.
- Variable Lifetime and Scope
- Demo: Variable Scope
- Demo: Variable Scope Cont.
- Summary

### Data Types

- Introduction
- Introducing Data Types
- Data Types
- Data Types Cont.
- Numeric Data Types
- Choosing an Integer Type
- Demo: Integer Data Types
- BigInteger Data Type
- Demo: BigInteger
- Summary

### Floating Point Data

- Introduction
- Floating-Point Data Types
- Decimal Data Type
- Demo: Floating-Point Types
- Demo: Floating-Point Cont.

- Summary

### Characters

- Introduction
- Char Data Type
- ASCII Characters
- Demo: Char Data Type
- String Data Types
- Demo: String Data Type
- Demo: Escape Characters
- Other Data Types and Objects
- Demo: Boolean Data Type
- Demo: Object Data Type
- Summary

### Constants and Enums

- Introduction
- Constants
- Demo: Constants
- Enumerations
- Demo: Enumerations
- Structures
- Demo: Structures
- The Complex Structure
- Demo: Complex Structure
- Summary