



C-Sharp

Overview:

- Why Learn C#?
- Variables and Arrays
- Expressions and Operators, Flow of Control Statements
- Classes and Methods – Basics & Advanced

Why Learn C#?

- Downloading and Installing Visual Studio
- Demo: Hello World!
- Hello World Quiz
- Deconstructing Hello World

Types and Variables

- Types in C#
- Variables in C#
- Demo: Hello <name>
- Demo: Simple Addition
- Demo: Comments and Formatting Strings
- Types and Variables

Expressions and Operators

- Expressions and Operators Explained
- Demo: Expressions and Operators
- Expressions and Operators

Flow of Control Statements

- The If Statement
- While Loops
- Live Coding: The Guessing Game
- Demo: Debugging and Breakpoints
- For Loops
- Conditional Statements and Loops
- Skill Check: Enhance the Guessing Game

Classes and Methods

- Classes vs Objects, What's the Difference?
- What are methods?
- Demo: Void Methods
- Demo: Parameters and Returning Values
- Fields and Properties
- Demo: Constructors and Overloading Methods
- Flowcharting: Rock Paper Scissors
- Classes And Methods

Arrays

- What are Arrays?
- Demo: Creating and Manipulating Arrays
- Demo: Foreach loops
- Demo: Fun With Strings
- Live Coding: Hangman
- Arrays

Advanced Methods and Classes

- Demo: The params keyword
- Demo: Output Parameters
- Reference vs Value Types
- Static vs Non-Static
- Reading Configuration Files
- A quick note
- Interfaces and Object Oriented Programming
- Live Coding: Logging Polymorphic Interface
- Inheritance
- Live Coding: RPG Bag System
- Advanced Methods and Classes

The logo for Pioneer Business Solutions features a central globe held by two hands, surrounded by a circular arrangement of colorful human figures. The word "Pioneer" is written in a blue, serif font above the globe, and "Business Solutions" is written in a blue, sans-serif font below it. The entire logo is set against a background of yellow, wavy lines.

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