

Managing Multiple Values by Andrew Cain

Act I: Set up the story

The setting	Computers are unintelligent, but can process data quickly
The protagonist	Developers need tools to make it possible to process lots of data
The imbalance	Variables can store data, but lots of data?
The balance	With the right tools processing lots of data is a simple loop away...
The solution	Use arrays to store multiple values in a single variable

Act II: Develop the action

5-Minute Column	15-Minute Column	45-Minute Column
See how arrays can be used to store and retrieve multiple values	An array is a variable that stores multiple values	
	Assignment statements can be used to store values in arrays	
	You can read values from an array within an expression	
Define actions for each element of an array with little code using a for loop	See how the for loop moves an index variable from one value to another	
	Use the index variable with an array to define the actions to perform for each element	
	Define code in the for loop to be performed for each element of the array	
Put these concepts to practice by using arrays in your own programs	Create arrays to store multiple values	
	Use functions and procedure to manipulate these values using for loop	
	Pass arrays by reference to avoid copying all of the arrays values	

Turning point	Will you be able to process large amounts of data in your programs?
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Act III: Frame the resolution

The crisis	Computers process data quickly, but plain variables need too much code...
The solution	Use arrays to store multiple values in a single variable
The climax	Arrays make processing lots of data a simple loop away
The resolution	Start using arrays and for loops in your programs