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| 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 |  |
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| Assignment statements can be used to store values in arrays |  |
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| You can read values from an array within an expression |  |
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| 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 |  |
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| Use the index variable with an array to define the actions to perform for each element |  |
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| Define code in the for loop to be performed for each element of the array |  |
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| Put these concepts to practice by using arrays in your own programs | | | Create arrays to store multiple values |  |
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| Use functions and procedure to manipulate these values using for loop |  |
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| Pass arrays by reference to avoid copying all of the arrays values |  |
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| Turning point | Will you be able to process large amounts of data in your programs? | | | |
| 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 | | | |