Working with Variables

* Variables are storage containers
  + '$' before the name
  + System variables
    - Get-Variable
* PowerShell is dynamically typed
  + Will turn what you have into what you need if possible
  + Variables can be cast [int]
  + Data types
    - int
      * 32-bit signed integer
    - long
      * 64-bit signed integer
    - string
      * string of unicode characters
    - char
      * unicode 16-bit character
    - bool
      * true/false
    - byte
      * 8-bit unsigned character
    - double
      * double-precision 64-bit floating-point number
    - decimal
      * 128-bit decimal value
    - single
      * single-precision 32-bit floating-point number
    - array
      * array of values
    - xml
      * XML document
    - hashtable
      * hashtable object (like a dictionary object)

$a = 12

$a | Get-Member

$b = "12"

$b.GetType()

$c = $a + $b

$c

$c.GetType()

$b.GetType()

$d = $b + $a

$d

$d.GetType()

* Strings
  + Expandable strings " "
  + Literal strings ' '
  + Escape character `

"The value of $a is $a"

'The value of $a is $a'

"The value of `$a is $a"