

# Built-In Functions

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Fall 2007

CS 113: Introduction to Computers

Lecture 3, September 25, 2007

# Numeric Functions

- **Sqr** calculates the square root of a number
- **Int** returns the greatest integer less than or equal to a number
- The output of **Round**( $n, r$ ) is the number  $n$  rounded to  $r$  decimal places. The parameter  $r$  can be omitted to round to the nearest whole number

# String Functions

- **Left**(*str*,*n*) returns the string consisting of the first *n* characters of *str*
- **Right**(*str*,*n*) returns the string consisting of the last *n* characters of *str*
- **Mid**(*str*,*m*,*n*) returns the string consisting of *n* characters of *str*, beginning with the *m*<sup>th</sup> character
- **Ucase**(*str*) yields a copy of the string *str* with all lowercase letters capitalized
- **Trim**(*str*) is the string *str* with all leading and trailing spaces removed

# String-Related Numeric Functions

- **Len**(*str*) gives the number of characters in a string (i.e., its length)
- **InStr**(*str1*,*str2*) returns the position in *str1* at which *str2* is first found, or 0 if *str2* is not a substring of *str1*

# Format Functions

- **FormatNumber**( $n,r$ ) is the string containing the number  $n$  rounded to  $r$  decimal digits, with commas as thousands separators
- **FormatCurrency**( $n,r$ ) is the string consisting of a dollar sign followed by the output of **FormatNumber**( $n,r$ ) and enclosed in parentheses if  $n$  is negative
- **FormatPercent**( $n,r$ ) is the string with a number displayed as a percent and rounded to  $r$  decimal places. The default value of  $r$  here and above is 2, so  $r$  can be skipped for these three functions
- **FormatDateTime**( $dateString, vbLongDate$ ) converts from “6-10-2007”, “6-10-07”, or “6/10/07” to “Sunday, June 10, 2007” and likewise

# Generating Random Numbers

- **Rnd** returns a random number from  $0$  up to (but not including)  $1$ .