

Excel VBA Programming Functions

Visual Basic for Applications (VBA) gives experienced Excel users a wide range of options for creating Excel spreadsheets and customizing how they look and function. Speaking of functions, the table following shows Excel VBA functions and what they accomplish.

Function	What It Does
Abs	Returns the absolute value of a number
Array	Returns a variant that contains an array
Asc	Converts the first character of string to its ASCII value
AscB	Converts the first byte of the first character of a string to its character code value
AscW	Converts the first character of a string to its Unicode character code
Atn	Returns the arctangent of a number
CallByName	Get or set a property or invoke a method
CBool	Converts an expression to boolean
CByte	Converts an expression to byte data type
CCur	Converts an expression to currency data type
CDate	Converts an expression to date data type
CDbl	Converts an expression to double data type
CDec	Converts an expression to decimal data type
Choose	Selects and returns a value from a list of arguments
Chr	Converts an ANSI value to a string
ChrB	Returns a single-byte character associated with a specific character code
ChrW	Returns a Unicode character string associated with a specific character code
CInt	Converts an expression to integer data type
CLng	Converts an expression to long data type
Command	Returns the argument portion of the command line used to launch an application
Cos	Returns the cosine of a number
CreateObject	Creates an OLE Automation object
CSng	Converts an expression to single data type
CStr	Converts an expression to string data type
CurDir	Returns the current directory path
CVar	Converts an expression to variant data type
CVErr	Returns a user-defined error number
Date	Returns the current system date
DateAdd	Returns a date with a specific date interval added to it
DateDiff	Returns a date with a specific date interval subtracted from it
DatePart	Returns an integer containing a specific part of a date
DateSerial	Converts a date to a serial number
DateValue	Converts a string to date
Day	Returns the day of the month of a date

DDB	Returns the depreciation of an asset for a specific time period using the double-declining balance method
Dir	Returns the name of a file or directory that matches a pattern
DoEvents	Yields execution so the operating system can process other events
Environ	Returns a string associated with an operating system environment variable
EOF	Returns True if the end of a text file has been reached
Error	Returns the error message the corresponds to an error number
Exp	Returns the base of the natural logarithms (e) raised to a power
FileAttr	Returns the file mode for a text file
FileDateTime	Returns the date and time when a file was last modified
FileLen	Returns the number of bytes in a file
Filter	Returns a subset of a larger array based on filtering criteria
Fix	Returns the integer portion of a number
Format	Displays an expression in a particular format
Format Currency	Returns a number as a string, formatted as currency
FormatDate Time	Returns a number as a string, formatted as a date and/or time
Format Number	Returns a number as a formatted string
Format Percent	Returns a number as a string, formatted as a percentage
FreeFile	Returns the next file number available for use by the Open statement
FV	Returns the future value of an annuity based on periodic, fixed payments and a fixed interest rate
GetAll	Returns a list of key settings and their values (originally Settings created with SaveSetting) from an application's entry in the Windows registry
GetAttr	Returns a code representing a file attribute
GetObject	Retrieves an OLE Automation object from a file
GetSetting	Returns a key setting value from an application's entry in the Windows registry
Hex	Converts from decimal to hexadecimal
Hour	Returns the hour of a time
IIf	Returns one of two parts, depending on the evaluation of an expression
Input	Returns a specific number of characters from an open text file
InputB	Returns a specific number of bytes from an open text file
InputBox	Displays a box to prompt a user for input
InStr	Returns the position of a string within another string
InStrB	Returns the byte position of a string within another string
InStrRev	Returns the position of a string within another string, beginning at the back end of the string
Int	Returns the integer portion of a number
IPmt	Returns the interest payment for a given period of an annuity based on periodic, fixed payments and a fixed interest rate
IRR	Returns the internal rate of return for a series of periodic cash flows
IsArray	Returns True if a variable is an array

IsDate	Returns True if a variable is a date
IsEmpty	Returns True if a variable has been initialized
IsError	Returns True if an expression is an error value
IsMissing	Returns True if an optional argument was not passed to a procedure
IsNull	Returns True if an expression contains no valid data
IsNumeric	Returns True if an expression can be evaluated as a number
IsObject	Returns True if an expression references an OLE Automation object
Join	Returns a string created by joining a number of substrings contained in an array
LBound	Returns the lower bound of an array
LCase	Returns a string converted to lowercase
Left	Returns a specified number of characters from the left of a string
LeftB	Returns a specified number of bytes from the left of a string
Len	Returns the length of a string, in characters
LenB	Returns the length of a string, in bytes
Loc	Returns the current read or write position of a text file
LOF	Returns the number of bytes in an open text file
Log	Returns the natural logarithm of a number
LTrim	Returns a copy of a string with no leading spaces
Mid	Returns a specified number of characters from a string
MidB	Returns a specified number of bytes from a string
Minute	Returns the minute of a time
MIRR	Returns the internal rate of return for a series of periodic cash flows (using different rates)
Month	Returns the month of a date
MonthName	Returns a string indicating the specified month
MsgBox	Displays a modal message box
Now	Returns the current system date and time
NPer	Returns the number of periods for an annuity based on periodic, fixed payments and a fixed interest rate
NPV	Returns the net present value of an investment based on a series of periodic cash flows and a discount rate
Oct	Converts from decimal to octal
Partition	Returns a string variant indicating where a number occurs in a calculated series of ranges
Pmt	Returns the payment for an annuity based on periodic, fixed payments and a fixed interest rate
PPmt	Returns the principal payment for a given period of an annuity based on periodic, fixed payments and a fixed interest rate
PV	Returns the present value of an annuity based on periodic, fixed payments to be paid in the future and a fixed interest rate
QBColor	Returns the RGB color code corresponding to the specified color number (used for compatibility with Quick Basic)
Rate	Returns the interest rate per period for an annuity
Replace	Returns a string where one substring has been replaced with another
RGB	Returns a number representing an RGB color value
SLN	Returns the straight-line depreciation of an asset for a single period
Space	Returns a string with a specified number of spaces

Spc	Position output in an output stream
Split	Returns an array consisting of a number of substrings
Sqr	Returns the square root of a number
Str	Returns a string representation of a number
Right	Returns a specified number of characters from the right of a string
RightB	Returns a specified number of bytes from the right of a string
Rnd	Returns a random number between 0 and 1
Round	Rounds a number to a specific number of decimal places
RTrim	Returns a copy of a string with no trailing spaces
Second	Returns the second of a time
Seek	Returns the current position in a text file
Sgn	Returns an integer that indicates the sign of a number
Shell	Runs an executable program
Sin	Returns the sine of a number
StrComp	Returns a value indicating the result of a string comparison
StrConv	Returns a string variant converted as specified
String	Returns a repeating character or string
StrReverse	Reverses the character order of a string
Switch	Evaluates a list of expressions and returns a value associated with the first expression in the list that is True
SYD	Returns the sum-of-years' digits depreciation of an asset for a specified period
Tab	Positions output in an output stream
Tan	Returns the tangent of a number
Time	Returns the current system time
Timer	Returns the number of seconds since midnight
TimeSerial	Returns the time for a specified hour, minute, and second
TimeValue	Converts a string to a time serial number
Trim	Returns a string containing a copy of a specified string without leading spaces and trailing spaces
TypeName	Returns a string that describes the data type of a variable
UBound	Returns the upper bound of an array
UCase	Converts a string to uppercase
Val	Returns the numbers contained in a string
VarType	Returns a value indicating the subtype of a variable
Weekday	Returns a number representing a day of the week
Year	Returns the year of a date