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Logo Commands

This section contains an alphabetic listing of all Logo commands.

[.Top ↑](#)

[.WHO](#)

Reports a list of objects listening to commands.

[.WINDOWS](#)

Call a Windows system function (not available on the Mac).

[ATop ↑](#)

[ABOUT](#)

User-supplied procedure to display an About box.

[ABS](#)

Reports the absolute value of a number.

[ACTIVEWINDOW \(ACTIVEW\)](#)

Reports the name of the active graphics window.

[AGET](#)

Reports the value of an array element.

[ALERT](#)

Displays an alert box.

[ALIAS](#)

Defines alias names.

[ALL \(CONTENTS, CO\)](#)

Outputs a complete structured contents list.

[ALLTURTLES](#)

A list of all turtles.

[AND](#)

Logical AND.

[APPENDMENU](#)

Appends a new menu.

[APPENDMENUCOMMAND](#)

Appends a new menu item.

[APPENDMENUITEM](#)

Appends a new menu item.

[APPLY](#)

Applies a parameter list to a procedure.

[ARCCOS \(ACOS\)](#)

Reports the arccosine.

[ARCCOT \(ACOT\)](#)

Reports the arccotangent.

ARCCSC (ACSC)	Reports the arccosecant.
ARCSEC (ASEC)	Reports the arcsecant.
ARCSIN (ASIN)	Reports the arcsine.
ARCTAN (ATAN)	Reports the arctangent.
ARCTAN2 (ATAN2)	Reports the polar angle heading of the motion vector (position change) deltaX deltaY.
ARRAY	Creates an array.
ARRAY? (ARRAYP)	Reports TRUE if the object is an array.
ARRAYDIMS	Reports the structure of an array.
ASCII	Converts a character into its ASCII value.
ASET	Sets the value of an array element.
ASK	Makes objects execute a list of commands.

Top ↑

BACK (BK)	Moves a turtle backwards.
BACKGROUND (BG)	Reports the background color.
BACKTRACE (BT)	Prints a backtrace.
BGPATTERN	Reports the background pattern.
BLUEBOT . CLEAR	Clears all commands stored in Blue-Bot's memory.
BLUEBOT . CLOSE	Closes the Blue-Bot connection.
BLUEBOT . GO	Executes commands stored in Blue-Bot's memory.
BLUEBOT . OPEN	Opens the connection to Blue-Bot.
BLUEBOT . RUN	Executes Blue-Bot commands.
BLUEBOT . STATUS	Reports status information about Blue-Bot.
BLUEBOT . WRITE	Downloads a procedure to Blue-Bot.
BLUEBOT? (BLUEBOTP)	Tests if the Blue-Bot drivers are installed.
BURIED	Outputs a structured contents list of all buried elements.
BURIED? (BURIEDP)	Outputs TRUE if the element described by its input is buried.
BURIEDNAMES	Outputs a list of all buried names.
BURIEDPROCS	Outputs a list of all buried procedures.
BURIEDPROPS	Outputs a list of all buried property lists.
BURY	Makes names and procedures invisible.
BURYALL	Makes all names and procedures invisible.
BURYNAME	Makes one or more names invisible.
BURYNAMES	Makes all names invisible.
BURYPROC	Makes one or more procedures invisible.
BURYPROCS	Makes all procedures invisible.
BURYPROP	Makes one or more property lists invisible.
BURYPROPS	Makes all property lists invisible.
BUTFIRST (BF)	Reports all but the first element of its input.
BUTLAST (BL)	Reports all but the last element of its input.
BUTMEMBER (BM)	Removes an element from its input.
BUTTON? (BUTTONP)	Reports the state of a mouse button.
BYE (QUIT, EXIT)	Ends Logo.
BYTEARRAY	Creates an array of byte values.

BYTEARRAY? (**BYTEARRAYP**) Reports TRUE if the object is a bytearray.

CTop ↑

CATCH Catches runtime errors and THROWN data.

CHAR Converts a number into a Unicode character.

CHECKTYPE Checks an value for a type.

CLEAN Erases the graphics pane.

CLEARINPUT Clears all input from a stream.

CLEARSCREEN (**CS**) Erases the graphics pane and homes the turtle.

CLEARTEXT (**CT**) Clears the Listener pane.

CLOSE Closes a stream.

CLOSEWINDOW Closes a window.

COLOR Reports the color for a name or value if possible.

COLORINDEX (**BASECOLOR**) Coerces a color value to a basic Logo color number.

COLORNAME Reports the name of a color if possible.

COLORS Reports a list of available color names.

COMMAND Invoke a menu command by its ID number.

CONTINUE (**CO**) Ends a pause.

COPYDEF Copies a procedure definition.

COS Reports the cosine.

COT Reports the cotangent.

COUNT Counts the number of items in its input.

CPROP Calls a property as a procedure.

CREATE Creates a file.

CREATE.DIR Creates a folder.

CSC Reports the cosecant.

CTURTLES Arranges turtles in a circle.

CURDIR Reports the current working directory.

DTop ↑

DATE Reports the date.

DECLARE (**DCL**) Creates an object.

DEFINE Defines a procedure.

DEFINED? (**DEFINEDP**) Checks whether a procedure is defined.

DELETE Deletes one or more files from disk.

DELETEMENU Deletes a menu.

DELETEMENUITEM Deletes a menu item.

DIRECTORY (**DIR**) Lists the contents of current working directory.

DISTANCE Reports the distance between the turtle and a location.

DOT Draws a dot.

DOT? (**DOTP**) Tests whether a pixel with a color other than the background color is present.

DOTCOLOR Reports the color of a pixel.

DRAW Clears the current graphics window and resets all attached turtles.

ETop ↑

EACH	Applies a runlist to every object in the TELL list.
EDALL	Edits the entire Logo workspace.
EDIT (ED)	Edits parts or all of the Logo workspace.
EDL	Edits a list.
EDN	Edits one or more Logo names.
EDNS	Edits all Logo names.
EDP	Edits one or more Logo procedures.
EDPL	Edits one or more Logo property lists.
EDPLS	Edits all Logo properties.
EDPS	Edits all user-defined, unburied procedures.
ELSE	Starts the ELSE branch of an IF command.
EMPTY? (EMPTYP)	Checks whether a name is empty.
END	Ends a procedure definition.
EOF? (EOFP)	Outputs TRUE if the current stream is at EOF.
ERALL	Edits the entire Logo workspace.
ERASE (ER)	Erases Logo elements.
ERN	Erase one or more Logo names.
ERNS	Erases all Logo names.
ERPL	Erases one or more Logo property lists.
ERPLS	Erases all Logo properties.
ERPS	Erases all procedures.
EVAL	Runs a list and collects all outputs.
EVERY	Outputs a list of objects.
EXECTIME	Outputs the number of microseconds spent inside a procedure.
EXPN (EXP)	Calculates the natural base e raised to a power.
EXTENT	Reports the extent of the current Graphics window.

FTop ↑

FENCE	Fences all turtles inside the drawing borders.
FILE.INFO	Reports information about a file.
FILE? (FILEP)	Reports TRUE if a file or directory exists.
FILL	Fills an area.
FILLARRAY	Sets the values of an array.
FINDMENUID	Finds the ID of a menu item.
FIRST	Reports the first element of its input.
FLATTEN	Reports a flat version of its list input.
FONT	Reports the current font of the first active turtle.
FONTS	Reports a list of all loaded and available fonts.
FOR	Runs a list for a defined number of times.
FOREACH	Runs a list for each element of its first input.
FOREVER	Runs a list forever.
FORWARD (FD)	Moves a turtle forward.
FPUT	Prepends an element to its input.

FROMMEMBER (FM)	Removes the first part of its input until a pattern is found.
FULLSCREEN (FS)	Switches to the Full Screen perspective.

GTop ↑

GETBYTE	Reads one byte from the input stream.
GETX (XCOR)	Reports the X coordinate of a turtle.
GETXY (POS)	Reports the coordinates of a turtle.
GETY (YCOR)	Reports the Y coordinate of a turtle.
GLIST	Reports the property lists that contain a property with a given name.
GO	Jumps to a label inside a procedure.
GPROP	Retrieves a property.
GRID	Sets the size of the graphics grid.
GRIDOFF	Hides the grid of the Graphics window.
GRIDON	Displays the grid of the Graphics window.

HTop ↑

HALT	Stops one or all background procedures.
HEADING	Reports the heading of a turtle.
HELP	Displays help for a command.
HIDETURTLE (HT)	Hides a turtle.
HOME	Moves the turtle back to [0 0].

ITop ↑

IF	Runs instructions based on a condition.
IFFALSE (IFF)	Runs a list if TEST was false.
IFTRUE (IFT)	Runs a list if TEST was true.
IGNORE	Ignores the output of a procedure.
INT	Reports the integer part of a number.
IS.A	Checks an object for being of a specific type.
ISEQ	Outputs a list of sequential integers.
ITEM	Returns a specific element of its input.

KTop ↑

KEY	Reports the code of the last key that the user typed.
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LTop ↑

LABEL	Marks a target for the GO command.
LAST	Reports the last element of its input.
LAUNCH	Launches a runlist or procedure for execution in the background.
LEFT (LT)	Turns a turtle left.
LIST	Concatenates its inputs to a list.
LIST? (LISTP)	Checks for its input being a list.
LISTARRAY	Reports the values of an array as a list.
LOAD	Loads a file into Logo.

LOADPIC	Loads a picture as background picture.
LOADSHAPE	Loads a turtle shape from disk and sets the shape of all active turtles.
LOADSNAP	Loads a bitmap.
LOCAL	Declares local variables inside a procedure.
LOCKSHAPE	Prevents a bitmap from turning.
LOG (LN)	Outputs the natural logarithm of its input.
LOG10	Outputs the logarithm of its input.
LOGAND	Combines its inputs with a boolean AND operation.
LOGNOT	Reports the bitwise logical complement of its input.
LOGOR	Combines its inputs with a boolean OR operation.
LOGXOR	Combines its inputs with a boolean XOR operation.
LOWERCASE	Converts its argument to lower case.
LPUT	Appends an element to its input.
LSH (ASHIFT)	Shifts its input with sign extension.
LTURTLES	Arranges turtles in a row.

MTop ↑

MAKE	Assigns a value to a name.
MEMBER? (MEMBERP)	Checks if an object is part of another object.
MILLISECONDS	Outputs the number of milliseconds spent since January 1, 1970.
MIXEDCASE	Converts its argument to mixed case.
MODULO	Outputs the remainder of two numbers.
MOUSE	Reports the position of the mouse cursor.
MOUSESHAPE	Reports the shape of the mouse cursor.

NTop ↑

NAME	Assigns a value to a name.
NAME? (NAMEP)	Checks whether its input is assigned a value.
NAMELIST	Outputs a structured contents list with names.
NAMES	Outputs a structured contents list with all names.
NEW	Creates a new Logo object.
NOT	Negates its input.
NUMBER? (NUMBERP)	Checks its input for being a number.

OTop ↑

ONCOMMAND	Defines the commands that execute when a menu item is selected.
OPEN	Opens a file and returns the channel number.
OPEN . PORT	Opens a serial port for I/O.
OR	Performs a logical OR on its input.
ORIGIN	Reports the origin of a turtle's coordinate system.
OUTPUT (OP)	Exits a procedure and outputs a value.

PTop ↑

PANGLE	Reports the turtle's angle as a polar angle.
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PARSE	Parses a string and outputs a list.
PATTERN	Reports the turtle's pattern.
PAUSE	Pauses a procedure.
PDIST	Reports the distance from the turtle to its home.
PEEKBYTE	Returns the next character from the input stream without reading it.
PEN	Reports the pen mode.
PENCOLOR (PC)	Reports the pen color.
PENDOWN (PD)	Puts the pen down.
PENDOWN? (PENDOWNP)	Checks whether the pen is down.
PENERASE (PE)	The pen draws with the background color.
PENREVERSE (PX)	The pen inverts all colors.
PENUP (PU)	The pen moves up.
PHEADING	Reports the turtle's polar heading.
PI	Reports the number Pi.
PICK	Randomly picks an element.
PLAY	Plays sound files and lists of notes.
PLIST	Reports the property list of a name.
PLISTS (PROPERTIES)	Outputs a structured contents list with all properties.
PLLIST	Outputs a structured contents list with properties.
POALL	Prints the entire Logo workspace.
PON	Prints a Logo name.
PONS	Prints all Logo names.
POPL	Prints one or more Logo property lists.
POPLS	Prints all Logo properties.
POPRS	Prints the title of all Logo primitives.
POPS	Prints all Logo procedures.
POT	Prints the title line of one or more user-defined procedures.
POTS	Prints the title line of all user-defined procedures.
PPOS	Reports the turtle's polar position.
PPROP	Stores a property.
PPROPS	Stores a list of properties.
PRIMITIVE? (PRIMITIVEV)	Checks its input for being a built-in procedure or macro.
PRIMITIVES	Outputs a structured contents list with all primitives.
PRINT (PR)	Prints text with a line feed.
PRINTLINE	Prints a list of numbers as Unicode characters.
PRINTOUT (PO)	Prints procedures, names, or properties.
PRINTQUOTE (PQ)	Prints its input and a newline.
PROBOT .LIGHTS	Turns the Pro-Bot's headlights on or off.
PROBOT .READ	Uploads all Pro-Bot procedures into Logo's workspace.
PROBOT .SOUND	Plays Pro-Bot sounds.
PROBOT .WRITE	Downloads all Pro-Bot procedures to the Pro-Bot.
PROBOT? (PROBOTP)	Tests if a Pro-Bot is connected.
PROCEDURE? (PROCEDUREP)	Checks its input for being a user-defined procedure.
PROCEDURES	Outputs a list with all user procedures.

PROCLIST	Outputs a structured contents list with procedures.
PSETHEADING (PSETH)	Sets the polar heading of a turtle.
PUTBYTE	Writes a data byte or a Unicode character to the output stream.
PUTBYTES	Writes data bytes or characters to the output stream and reads a reply.

QTop ↑

QUOTE	Quotes its input.
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RTop ↑

RANDOM	Outputs a random number.
READ	Reads one Logo word.
READCHAR (RC)	Reads a character from the input stream.
READLINE	Reads a line and outputs it as a list of numbers.
READLIST (RL)	Reads a line and outputs it as a list.
READPROMPT (RP)	Opens a dialog box and reads a line.
READQUOTE (RQ)	Reads a line.
READWORD	Reads the first word of a line.
RECYCLE	Starts the garbage collector.
REMPROP	Removes a property.
RENAME	Renames a disk file.
REPCOUNT	Reports the value of the REPEAT counter.
REPEAT	Runs a runlist repeatedly.
REPTOTAL	Reports the total number of REPEATs.
RERANDOM	Seed the random number generator.
RESTART	Erases everything and restarts Logo.
RIGHT (RT)	Turns a turtle right.
ROUND	Rounds a number.
RSEQ	Outputs a list of equally spaced rational numbers.
RUN	Runs a word or list.

STop ↑

SAVE	Saves the workspace to disk.
SAVEPIC	Saves the contents of the Graphics window.
SAVESHape	Saves a turtle shape.
SAVESNAP	Saves a turtle shape.
SEC	Reports the secant.
SELECT . FILE	Displays a dialog to select a disk file.
SELECT . FOLDER	Displays a dialog to select a disk folder.
SENTENCE (SE)	Concatenates its inputs to a list, flattening lists.
SETACTIVEWINDOW (SETACTIVEW)	Sets the name of the active window.
SETBG	Sets the background color.
SETBGPATTERN	Sets the background pattern.
SETCURDIR	Changes the current working directory.

SETEXTENT	Set the extent of the current Graphics window.
SETFONT	Sets the turtle drawing font.
SETHEADING (SETH)	Sets the heading of a turtle.
SETMOUSESHAPE	Sets the shape of the mouse cursor.
SETORIGIN	Sets the coordinate system origin of the active turtles.
SETP	Sets the turtle's polar position.
SETPATTERN	Sets the turtle pattern.
SETPC	Sets the pen color.
SETPEN	Sets the pen characteristics.
SETSHAPE	Sets the shape of all active turtles.
SETSPEED	Sets the speed in which turtle commands are executed.
SETSTEPsize	Sets the step size of all active turtles and bitmaps.
SETTURTLENAME (SETTNAME)	Sets the name of a turtle.
SETTURTLES (SETT)	Creates a range of turtles.
SETTURTLESIZE (SETTSIZE, SETTS)	Sets the size of a turtle.
SETTWINDOW	Attaches a turtle to a Graphics window.
SETVELOCITY	Sets the independent speed of a turtle.
SETWIDTH (SETW)	Sets the pen width.
SETWINSIZE	Sets the size of a window.
SETWPOS	Sets the position of a window.
SETWSIZE	Sets the size of a floating window.
SETX	Sets the X coordinate of a turtle.
SETXY (SETPOS)	Sets the coordinates of a turtle.
SETY	Sets the Y coordinate of a turtle.
SHAPE	Outputs the name of the first active turtle's shape.
SHOW	Prints text with a line feed.
SHOWN? (SHOWNP)	Reports whether a turtle is visible.
SHOWTURTLE (ST)	Makes a turtle visible.
SIN	Reports the sine.
SLOWTURTLE	Slows down the turtle to half speed.
SNAP	Moves parts of the graphics window into a bitmap.
SNAPSIZE	Outputs the size of a bitmap.
SPEED	Reports the speed in which turtle commands are executed.
SPLITSCREEN (SS)	Switches to the Split Screen perspective.
SQRT	Reports the square root.
STAMP	Draw a bitmap or turtle.
STAMPOVAL	Draws an oval.
STAMPRECT	Draws a rectangle.
STEPsize	Outputs the step size of the first active turtle or bitmap.
STOP	Exits a procedure.
SUBDIR	Lists the contents of current working directory.
SUBST	Substitutes text in a word or a list.

TTop ↑

TAN	Reports the tangent.
TELL	Defines a list of objects listening to commands.
TELLALL	Tells a range of turtle numbers.
TELLEVEN	Tells all turtles with even numbers.
TELLODD	Tells all turtles with odd numbers.
TEST	Test a condition; used with IFTRUE and IFFALSE.
TEXT	Outputs a procedure definition.
TEXTARRAY	Sets the structure of an array.
TEXTSCREEN (TS)	Switches to the Text Screen perspective.
THEN	Starts the THEN branch of an IF command.
THING	Reports the value of a name.
THROW	Throws a Logo word or a runtime error.
TIME	Outputs the time.
TO	Defines a procedure.
TOplevel	Returns to toplevel.
TOWARDS	Reports the angle of a position compared to the turtle position.
TURTLENAME (TNAME)	Gets the name of the first active turtle.
TURTLENAMES (T NAMES)	Outputs a list of all turtle names.
TURTLES	Reports the number of turtles.
TURTLESIZE (T SIZE)	Reports the size of a turtle.
TURTLETEXT (TT)	Prints its input on the Graphics window.
TURTLETEXTBASE (TTBASE)	Outputs the baseline offset of the first listening turtle's font.
TURTLETEXTSIZE (TTSIZE)	Outputs the dimensions of a text drawn with the first listening turtle.
TWINDOW	Outputs the name of the window of the first active turtle.
TYPE	Prints text.
TYPEOF	Reports the type of a name.

UTop ↑

UNBURY	Makes names and procedures visible.
UNBURYALL	Makes all names and procedures visible.
UNBURYNAME	Makes one or more names visible.
UNBURYNAMES	Makes all names visible.
UNBURYPROC	Makes one or more procedures visible.
UNBURYPROCS	Makes all procedures visible.
UNBURYPROP	Makes one or more property lists visible.
UNBURYPROPS	Makes all property lists visible.
UNGETBYTE	Pushes back one character to the input stream.
UNLOCKSHAPE	Lets a bitmap rotate according to the turtle's heading.
UPPERCASE	Converts its argument to upper case.

VTop ↑

VELOCITY	Reports the independent movement speed of a turtle.
VERINFO	Outputs Logo version information as a list.

VERSION (VER) Outputs the Logo version.

WTop ↑

WAIT Waits for a number of milliseconds.

WHILE Runs a list until a condition is false.

WHO Reports a list of objects listening to commands.

WIDTH Reports the pen width.

WINDOW Removes the boundary for turtle movements.

WINSIZE Reports the size of a window.

WORD Concatenates its inputs to a word.

WORD? (WORDP) Checks its input for being a word.

WORKSPACE.VIEW Switches to the Work perspective.

WPOS Outputs the position of a window.

WRAP Lets the turtles wrap inside the window.

WSIZE Reports the size of a window.

VariablesTop ↑

"LOGO.ENV Contains a property list of global program and system settings.

"PREFS System-wide properties.

:BASE Sets the numeric base used when printing numbers.

:CASE Makes Logo convert its input to upper case or not.

:CURRENT.GRAPHICS Contains the current graphics window name.

:CURRENT.WINDOW Contains the current window name.

:DATADIR Reports the user's data directory.

:DESKTOPDIR Reports the desktop directory.

:ERROR Contains the type of the last runtime error.

:ERRORTEXT Reports the text of the last caught runtime error or THROWN word.

:INITIAL.LAYOUT Reports or sets the initial layout of Logo panels.

:LAYOUT Reports or sets the layout of Logo panels.

:LOGODIR Reports Logo's startup directory.

:PICTURE.FORMAT Controls the format of saved pictures.

:PRECISION Sets the precision in which numbers are printed.

:STANDARD.INPUT The number of the input stream.

:STANDARD.OUTPUT The number of the output stream.

:TAB Sets the tab stop position.

:TRACE Controls the output of debugging information.

:USERNAME Reports the login user ID.

Math OperatorsTop ↑

*** (PRODUCT)** Calculates the product of its inputs.

+ (SUM) Reports the sum of its inputs.

- (DIFFERENCE) Outputs the difference of two or more numbers.

/ (QUOTIENT) Reports the quotient of its inputs.

< (.LT, LESS?, LESSP) Tests if its first input is less than its second input.

<code><=</code> (<code>.LE</code> , <code>LESSEQUAL?</code> , <code>LESSEQUALP</code>)	Tests if its first input is less than or equal to its second input.
<code><></code> (<code>!=</code> , <code>.NE</code> , <code>NOT.EQUAL?</code> , <code>NOT.EQUALP</code> , <code>NOTEQUAL?</code> , <code>NOTEQUALP</code>)	Tests its inputs for inequality.
<code>=</code> (<code>.EQ</code> , <code>EQUAL?</code> , <code>EQUALP</code>)	Tests its inputs for equality.
<code>></code> (<code>GREATER?</code> , <code>GREATERP</code> , <code>.GT</code>)	Tests if its first input is greater than its second input.
<code>>=</code> (<code>.GE</code> , <code>GREATEREQUAL?</code> , <code>GREATEREQUALP</code>)	Tests if its first input is greater than or equal to its second input.
<code>REMAINDER</code> (%)	Outputs the remainder of two numbers.
<code>^</code> (<code>POWER</code>)	Raises a number to the power of another number.