

Basic Reference

Binary Operators

Precedence	Operator	Notes
4	*	
	/	Forward slash is floating point divide. 22/7 is 3.142857
	\	Backward slash is integer divide, 22/7 is 3
	%	Modulus of integer division ignoring signs
	>>	Logical shifts up to 32 places, inserting zeros at the appropriate ends.
	<<	
3	+	
	-	
2	<	Compares as numbers or strings. If either is floating point it is compared as such, and the match is not exactly equal, but about 1 part in 100,000. Returns -1 for true, 0 for false.
	<=	
	>	
	>=	
	<>	
	=	
1	&	Binary operators on integers, but can be used as logical operators. Equivalent to and, or and exclusive or.
	^	

Unary Operators (General)

Operator	Notes
asc(s\$)	Return ASCII value of first character or zero for empty string
atan(n)	Arctangent of n in degrees
chr\$(n)	Convert ASCII to string
cos(n)	Cosine of n, n is in degrees.
<i>deek(a)</i>	
<i>event(v,r)</i>	
exp(n)	e to the power n
<i>inkey\$()</i>	
int(n)	Whole part of the float value n. Integers are unchanged.
isval(s\$)	Converts string to number, returns -1 if okay, 0 if fails.
<i>key()</i>	
left\$(a\$,n)	Left most n characters of a\$
len(a\$)	Return length of string in characters.
log(n)	Natural Logarithm (e.g. ln2) of n.
mid\$(a\$,f,s)	Characters from a\$ starting at f (1 indexed), s characters. S is optional.
<i>peek(a)</i>	
rand(n)	Random integer $0 < x < n$ (e.g. 0 to n-1)
right\$(a\$,n)	Rightmost n characters of a\$
rnd(n)	Random number $0 < x < 1$, ignores n.
sin(n)	Sine of n, n is in degrees.
sqr(n)	Square root of n
str\$(n)	Convert n to a string
tan(n)	Tangent of n, n is in degrees.
<i>time</i>	
val(s\$)	Convert string to number. Error if bad number.

BASIC Commands (General)

Command	Notes
' <string>	Comment. This is a string for syntactic consistency. The tokeniser will process a line that doesn't have speech marks as this is not common. REM this is a comment is now ' "this is a comment"
assert <expr>	Error generated if <expr> is zero
clear	Clear out stack, strings, reset all variables.
end	End Program
new	Erase Program
run	Run Program
stop	Halt program with error
sys <address>	Call 65C02 machine code at given address. Passes contents of variables A,X,Y in those registers.