- <b>1234567890</b> .	list of colour codes	fprint
numerics	<pre>0 black 8 grey 1 blue 9 l.blue</pre>	fprint <i>filepath</i>
category: math (shares line)	<b>2</b> green <b>10</b> l.green <b>3</b> cyan <b>11</b> l.cyan	category: <b>output</b> (shares line)
use: <b>change main variable</b> (or use as params) to numeric values	4 red 5 magenta 6 brown 7 white 12 l.red 13 l.magenta 14 yellow 15 b.white	use: write <b>main variable</b> to open file designated by <i>filepath</i>
setting main variable	background colours	cls
<b>x</b> (line is now shared)	<b>0</b> black <b>1</b> blue	cls
category: <b>start line</b> (shared)	<ul><li>2 green</li><li>3 cyan</li></ul>	category: <b>output</b> (shares line)
use: <b>variablenamegoeshere</b> 5	<b>4</b> red <b>5</b> magenta	use: clears the screen. currently only affects text
variablename p "" arr # make array named p	6 brown 7 white	screen
timer	arrstdin	textmode
timer	arrstdin	textmode

# timer arrstdin textmode category: input (shares line) category: input (shares line) category: output -- own line use: change main variable to number of seconds past midnight use: change main variable to array containing lines of graphics commands to use text stdin

#### lineinput flineinput highlight lineinput flineinput *filepath* highlight colourcode category: **input** (shares line) category: output (shares line) category: **input** (shares line) use: **change main variable** to use: **change main variable** to use: change background colour of upcoming text output to string input from keyboard string of line from open file colourcode 0-15 (8-15 are a repeat of 0-7) time arropen \_\_\_ pset \_\_ \_\_ \_\_ time arropen *filepath* pset x y c category: input (shares line) category: input (shares line) category: output (shares line) use: **change main variable** to use: **change main variable** to use: draw dot at location (x,string of current time: array of file lines in $\mathbf{v}$ ) in colourcode $\mathbf{c}$ (0-15) hh:mm:ss filepath date arrcurl while date arrcurl *url* while category: **input** (shares line) category: **input** (shares line) category: **loop -- own line**

use: like **arropen**, except

downloads *url* into the array

use: **change main variable** to

string of the date: mm/dd/yyyy

use: mark the start of a loop

(will keep going, without

break)

sleep	command	for <u> </u>	
sleep seconds	command	for var start stop step	
category: input (shares line)	category: input (shares line)	category: loop own line	
use: wait for number of seconds before continuing with program	use: <b>change main variable</b> to array of command line arameters use: start a <b>for</b> local changing <b>var</b> from <b>s</b> are stop, by <b>step</b>		
print	prints	iftrue	
print	prints	iftrue <i>ckv</i>	
category: output (shares line)	category: output (shares line)	category: <b>conditional own</b> <b>line</b>	
use: output <b>main variable</b> to the screen (aka stdout.) command name dates back to teletypes	use: output <b>main variable</b> to the screen; like <b>print</b> but (s)tays on the same line.	use: run lines between <b>iftrue</b> and <b>fig</b> if <b>ckv</b> is "non-zero."	
plus	minus	sqr	
plus <i>numstrarr</i>	minus <i>numeric</i>	sqr	
category: math (shares line)	category: math (shares line)	category: math (shares line)	
use: <b>change main variable</b> to itself <b>plus</b> <i>num</i> or <i>string</i> or <i>array</i>	use: <b>change main variable</b> to use: <b>change main varial</b> itself <b>minus</b> <i>numeric</i> the square root of itse		

divby \_\_\_ times topwr divby *numeric* times *numeric* topwr *n* category: math (shares line) category: **math** (shares line) category: **output** (shares line) use: **change main variable** to use: change main variable to use: raise numeric **main** itself **divided** by numeric itself **times** numeric **variable** to the n-th power oct hex tan oct hex tan category: math (shares line) category: **math** (shares line) category: math (shares line) use: **change main variable** from use: **change main variable** from use: **change** numeric **main** numeric decimal to octal numeric decimal to hexadecimal variable to its tangent sin int COS sin int cos category: math (shares line) category: **math** (shares line) category: math (shares line)

use: **change** numeric **main** 

variable to its sine

use: **change** numeric **main** 

"float") to integer

variable from decimal (aka

use: **change** numeric **main** 

variable to its cosine

#### display ifmore ifless display ifmore ckv1 ckv2 ifless ckv1 ckv2 category: **output** (shares line) category: **conditional** -- **own** category: **conditional** -- **own** line line use: **1st time:** stop automatic graphics update. use: run lines between **ifmore** use: run lines between **ifless** 2nd, etc: update and fig if ckv1 is > ckv2 and fig if ckv1 is < ckv2 graphics try except graphics try except category: **output -- own line** category: conditional -- own category: conditional -- own line line use: dont (or stop) suppress(ing) graphics. this use: if code between use: put code that might not is the default for programs work between **try** and **except** to try/except fails, run the code catch or suppress the error after **except** colourtext colortext resume colourtext colourcode colortext colorcode resume category: **output** (shares line) category: **output** (shares line) category: **conditional** -- **own** line

use: change color of upcoming

text output to *colorcode* 0-15

use: mark the end if try /
except / resume command block

use: change colour of upcoming

text output to *colourcode* 0-15

function ? ? ...? locate get locate row column function name p1 p2 ... get parametername category: **output** (shares line) category: function -- own line category: **function** (shares line) use: move to textmode position use: define function named at *row, column name* with optional params *p1*, use: (**no longer required**) copy parametername value to main *p2*, etc. variable line \_\_ \_ \_ \_ python fig/next/nextin/wend line x1 y1 x2 y2 c python fig (interchangeable) category: output (shares line) category: **function -- own line** category: function -- own line use: draw line from (x1, v1)use: put inline python code use: finalize block started by to (x2, y2) in colourcode cbetween lines python and fig if/while/function/for/forin etc (0-15)break else pass else break pass category: **loop -- own line** category: function -- own line category: **conditional - own** line use: blocks (for/next, etc) use: put in the middle of a loop to exit (stop looping) require *something* inside use: after if- line, before lines; **pass** works / does fig. run lines if condition nothing **isnt** true

forin	lcase	ucase	
forin var array	lcase	ucase	
<pre>category: loop own line use: loop through each item in array; for each, set var to item</pre>	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
	use: <b>change main variable</b> to use: <b>change main variabl</b> all-lower-case copy of own value value		
str	ifequal	shell	
str	ifequal <i>ckv1 ckv2</i>	shell	
category: <b>function</b> (shares line)	category: <b>conditional own</b> <b>line</b>	category: <b>function</b> (shares line)	
use: convert main variable from numeric to string	use: run lines between <b>ifequal</b> and <b>fig</b> if <i>ckv1</i> equals <i>ckv2</i>	use: run contents of main variable in a command shell (os specific)	
asc	mod	mid	
asc	mod denominator	mid position len	
category: <b>function</b> (shares line)	category: math (shares line) use: change main variable to	category: <b>function</b> (shares line)	
use: <b>change main variable</b> from string to ascii code of first character	main variable modulus  denominator	use: <b>change main variable</b> to range of <b>len</b> items or characters from <b>position</b>	

randint	split	join	
randint smallst largst	split string splitby	join array usestring	
category: input (shares line)	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
use: <b>change main variable</b> to random number ranging from <b>smallst</b> to <b>largst</b>	use: split <b>string</b> by separator <b>splitby</b> in to array, to main variable	use: <b>change main variable</b> to string by joining <b>array</b> using <b>usestring</b>	
atn	instr	chdir	
atn	instr <i>lookin lookfor</i>	chdir	
category: math (shares line) use: change numeric main variable to its arctangent	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
	use: <b>change main variable</b> to numeric position of <i>lookfor</i> in <i>lookin</i>	use: change current folder to path string from main variable	
sgn	system	close	
sgn	system	close	
<pre>category: math (shares line) use: change main variable to -1 if its value is &lt; 0, or to 1 if &gt; 0. keep at 0, if 0</pre>	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
	use: put on (usually at the end of) a line to stop the program	use: close the open file designated by main variable	

val	len	arrshell	
val	len	arrshell	
category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
use: <b>change main variable</b> from string to numeric (int if whole)	use: <b>change main variable</b> to numeric length of main variable	use: <b>change main variable</b> to array of shell output (from main variable)	
not	ltrim	reverse	
not	ltrim	reverse	
category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	
use: <b>change main variable</b> to <b>zero</b> if non-zero; or <b>-1</b> if zero	use: strip whitespace from left side of main variable	use: like <b>arreverse</b> (which might be faster for an array) but also works on strings	
rtrim	chr	#	
rtrim	chr	#	
category: <b>function</b> (shares line)	category: <b>function</b> (shares line)	category: <b>comment</b> (can share)	
use: strip whitespace from right side of main variable	use: <b>change main variable</b> from numeric to ascii string	use: place at beginning (or end) of line, prior to a comment	

a	r	r	PI	10	r	se	۸
ч			•	•		J	•

# left \_\_

# right \_\_\_

#### arreverse

category: function (shares
line)

use: **change main variable** from array to reverse order of array

## left numofcharsoritems

category: function (shares
line)

use: change main variable to
\_\_ leftmost group of
characters or items

## right *numofcharsoritems*

category: function (shares
line)

use: change main variable to
\_\_ rightmost group of
characters or items

#### arrsort

#### arrsort

category: function (shares line)

use: **change main variable** to sort the array stored in it

# arrget \_\_\_\_

#### arrget array position

category: function (shares
line)

use: **change main variable** to **position**-th item from **array** 

# arrset \_\_ \_

#### arrset position setto

category: function (shares
line)

use: change *position*-th item in array in main variable to value of *setto* 

# ( ) : ; | = , .

## (all optional)

category: **optional** 

use: in a shared line (and some others) for aesthetics / notation or similarity to other languages

## end

#### end

category: function (shares
line)

use: interchangeable with
system which ends the program

# open \_\_\_

### open *mode*

category: function (shares
line)

use: open file at filepath main variable in mode "r" or "w"

swa	p	

# return \_\_\_

swap var1 var2

return *var* 

category:  ${\bf function}$  (shares

category: **function** (shares

line)

line)

use: change contents of *var1* to *var2* and vice-versa

use: (optional) exit current function, returning value var

(without return, defined

**function** wont change main var)

string \_\_ \_

license:

string len asciiorstr

category: **function** (shares

line)

license: creative commons cc0

1.0 (public domain)

use: **change main variable** to **len** instances of **ascii**or**str** 

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