Į		Х	Y	Z
	separator			£.41
!	.' (transpose) / permute for	rot90 repmat	system repelem (run-length decoding)	full blanks
	specify outputs	display stack (debug)	sound, soundsc, audiowrite	fopen, fwrite, fclose
\$	specify inputs		char(vpa())	fopen, fread, fclose
	comment	class	cast	typecast
	alternative default input/output spec Not used. String delimiter	intersect	and run-length encoding	bitand now / clock
(() assignment indexing / split	{ } assignment indexing	() assignment ind. with final : / split	() assignment ind. with initial : / split
	() reference indexing	{ } reference indexing	() reference ind. with final :	() reference ind. with initial :
) *	.*	kron	matrix product	Cartesian product
+	+		conv2	conv2(, 'same') / cconv
,	do twice	COS	sin	tan
-	break	setdiff continue	deconv pause	bitget
,	./	angle	right matrix divide	unwrap
0	Not used	predefined literals	predefined literals	
	Not used	predefined literals	predefined literals	
	Not used	predefined literals	predefined literals	
	Not used Not used	predefined literals predefined literals	predefined literals predefined literals	
	Not used	predefined literals	predefined literals	
	Not used	predefined literals	predefined literals	
	Not used	predefined literals		
	Not used	predefined literals		
	Not used colon (range)	predefined literals linearize array	comma-separated list	bitset
;	(90)	acos	asin	atan2
1	<	min	cummin	
= [==	isequal	strcmp	-
>	>	max	cummax	anaro
? ത	"for" / "do twice" value / "while" index	"for" index	why perms	sparse randperm
	all	all(, 1)	dec2base. Larger base, any symbols	base2dec. Larger base, any symbols
в	logical(dec2bin()-'0')	bin2dec(char(+'0'))	dec2bin	bin2dec
С			im2col	im2col(, 'distinct')
	disp(num2str(,)) / mat2str	disp(num2str())	sprintf / fprintf	disp
	multiply by 2 Not used. False (literal)	replace elements in array	exponents of prime factorization	fft, nfft
	Paste from clipboard G (user-input)	plot	imwrite / imagesc / image / imshow	appearance of graphics / format
	Paste from clipboard H	Copy to clipboard H	gg	
ı	Paste from clipboard I	Copy to clipboard I	col2im	image processing functions
	Paste from clipboard J	Copy to clipboard J		
	Paste from clipboard K Paste from clipboard L (multi-level)	Copy to clipboard K Copy to clipboard L (multi-level)	gallery	
	Paste from clipboard M (function-input)	mode	ganery	
N	stack size	nchoosek (array)	NaN	isnan
	zeros	datestr	datenum	datevec
	flip	flipud	pi	pdist2
	increment by 1 triu	accumarray triu(,1) / build matrix	rat tril	polyval / roots / polyfit / inpolygon tril(,-1) / build matrix
	sort	sortrows	circshift	sign / fftshift
	Not used. True (literal)		toeplitz	. 3
	str2num / string to array / square	str2double		
	num2str 2 raised to input			
	Not used	regexp	regexprep	
	Not used		inf	isinf
	Not used			
]	Not used. Array delimiter	ind2sub mod(1)+1	left matrix divida	divieore
ì	end (loops or conditional branches)	mod(1)+1 sub2ind	left matrix divide	divisors
,	^			
		sqrt	matrix power, or sum of matrix powers	Cartesian power
	unary minus / normalize uint8	•		Cartesian power
`	dowhile	while	tic	Cartesian power toc
` a	dowhile any	•	tic padarray / unpad array	Cartesian power
a b	dowhile	while	tic	Cartesian power toc
a b c	dowhile any bubble char (also for cell array) diff	while any(, 1)	tic padarray / unpad array strsplit strcat blkdiag	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd
a b c d	dowhile any bubble char (also for cell array) diff reshape / squeeze	while any(, 1) cat diag / spdiags	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power	Cartesian power toc base2base strjoin / convert to '#' and char 0
a b c d e f	dowhile any bubble char (also for cell array) diff reshape / squeeze find	while any(, 1) cat diag / spdiags strfind	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp
a b c d e f	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat	while any(, 1) cat diag / spdiags strfind ndgrid	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain
a b c d e f g h	dowhile any bubble char (also for cell array) diff reshape / squeeze find	while any(, 1) cat diag / spdiags strfind	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp
abcdef ghij	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s')	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain
a b c d e f g h i j k	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag
a b c d e f g h i j k l	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones	while any(, 1) cat diag / spdiags strfind ndgrid {,} urlread real upper / ceil clamp (limit to a range)	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag iclosest values log. With two inputs, specifies base	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaIn / betaIn hypergeom conj / real and imag
abcdef ghijkIm	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag
a b c d e f g h i j k l m	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember	while any(, 1) cat diag / spdiags strfind ndgrid {,} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 fcm fix
a b c d e f g h i j k l m n o p	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod	while any(, 1) cat diag / spdiags strfind ndgrid {,} urfread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,)	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 lcm fix isprime / totient function
abcdef ghijkl mnopq	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1	while any(, 1) cat diag / spdiags strfind ndgrid {,} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaIn hypergeom conj / real and imag log2 lcm fix isprime / totient function primes
abcdef ghijkl mnopqr	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imread imag iclosest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample
abcdef ghijkl mnopqrs	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1	while any(, 1) cat diag / spdiags strfind ndgrid {,} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaln hypergeom conj / real and imag log2 lcm fix isprime / totient function primes
abcdef ghiklmnopqrstu	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep strjust
abcdef ghilk mnopqrstuv	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cellzmat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat	while any(, 1) cat diag / spdiags strfind ndgrid {,} urlread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,)	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imread imag iclosest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaln hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep
abcdef ghi k mnopqrstuvw	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap	while any(, 1) cat diag / spdiags strfind ndgrid {,} urfread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique('rows')	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep strjust
abcdef gh; k mnopqrstuvwx	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack	while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique(,'rows')	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaIn hypergeom conj / real and imag log2 licm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep strjust symmetric range / array / deblank
abcdef ghijkl mnopqrst uvwxyz	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element nnz	while any(, 1) cat diag / spdiags strfind ndgrid {,} urfread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique('rows')	tic padarray / unpad array strsplit strcat blikdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammain / betain hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep strjust
abcdef ghijkl mnopqrst uvwxyz{	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element nnz Not used. Cell array delimiter	while any(, 1) cat diag / spdiags strfind ndgrid {,} urfread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique(,'rows') clc eye eye nonzeros / remove whitespace num2cell	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum eig / svd / strtrim hypot mat2cell	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaln hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample stid / cov / skewness / kurtosis strrep strjust symmetric range / array / deblank size mat2cell(x,ones(size(x,1),1),size(x,2))
. abcdef ghijkImnopqrstuvwxyz{	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element nnz Not used. Cell array delimiter abs / norm / determinant	while any(, 1) cat diag / spdiags strfind ndgrid {} urfread real lamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique('rows') clc eye nonzeros / remove whitespace	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum eig / svd / strtrim	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaln hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample std / cov / skewness / kurtosis strrep strjust symmetric range / array / deblank size mat2cell(x,ones(size(x,1),1),size(x,2)) bitor
abcdef ghijkImnopqrstuvwxyz{ }	dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element nnz Not used. Cell array delimiter	while any(, 1) cat diag / spdiags strfind ndgrid {,} urfread real upper / ceil clamp (limit to a range) ismember(, 'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique(,'rows') clc eye eye nonzeros / remove whitespace num2cell	tic padarray / unpad array strsplit strcat blkdiag expm / logical "infinite" graph power factor gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum eig / svd / strtrim hypot mat2cell	Cartesian power toc base2base strjoin / convert to '#' and char 0 gcd exp gammaln / betaln hypergeom conj / real and imag log2 lcm fix isprime / totient function primes randsample stid / cov / skewness / kurtosis strrep strjust symmetric range / array / deblank size mat2cell(x,ones(size(x,1),1),size(x,2))