		X	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')
,	do twice	COS	sin	tan
-	break	setdiff continue	deconv pause	bitget
;	./	angle	matrix /	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	push "for" value / "while" index	push "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		histcounts	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	
	Paste from clipboard G (user-input)	plot	imwrite / imagesc / image / imshow	appearance of graphics / format
	Paste from clipboard H	Copy to clipboard H		7,7
I.	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	ganory	
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 tril(,-1) / build matrix
	sort	sortrows	circshift	sign
	Not used. True (literal)		toeplitz	
	str2num / string to array / square	str2double		
	num2str 2 raised to input			
	Not used	regexp	regexprep	
	Not used	-33- 1	inf	isinf
	Not used			
]	Not used. Array delimiter	ind2sub mod(1)+1	matrix \	divisors
ì	end (loops or conditional branches)	sub2ind	maun (	divisors
, ]	^	sqrt	matrix ^	Cartesian power
	unary minus	•		
	dowhile	while	tic	toc
	any bubble	any(, 1)	padarray / unpad array strsplit	base2base
	char (also for cell array)	cat	strcat	strjoin
d	diff	diag / spdiags	blkdiag	gcd
, '				
	reshape / squeeze	atefinal	factor	ехр
f	find	strfind ndarid	factor	
f g	find logical / cell2mat	ndgrid	gamma / gammainc / betainc	gammaln / betaln
f g h i	find			
f g h i	find logical / cell2mat horzcat input input(,'s')	ndgrid {,} urlread real	gamma / gammainc / betainc hankel imread imag	gammaln / betaln
f g h i j k	find logical / cell2mat horzcat input input(,'s') lower / floor	ndgrid {} urlread real upper / ceil	gamma / gammainc / betainc hankel imread imag closest values	gammain / betain hypergeom conj / real and imag
f g h i j k	find logical / cell2mat horzcat input input(,'s') lower / floor ones	ndgrid {,} urlread real upper / ceil clamp (limit to a range)	gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base	gammaln / betain hypergeom conj / real and imag log2
f g h i j k l m	find logical / cell2mat horzcat input input(,'s') lower / floor	ndgrid {} urlread real upper / ceil	gamma / gammainc / betainc hankel imread imag closest values	gammain / betain hypergeom conj / real and imag
f g h i j k l m n o	find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64	gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix
f g h i i k l m n o p	find logical / cell2mat horzcat input input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,)	gamma / gammainc / betainc hankel imread imag closest values log. With two inputs, specifies base mean poly / interp1 round / change case cumprod	gammain / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function
f g h i j k l m n o	find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes
f g h i j k l m o p q	find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1 rand	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn	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	gammaln / betaln hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample
fg hijklmnopq	find logical / cell2mat horzcat input input(,'s') lower / floor ones ismember numel / size double / cell array to numeric / parity prod decrement by 1	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes
f g h   k   m n o p q r s t u	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	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample std / cov strrep stripust
f g h i	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	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,)	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample std / cov strrep
f ghi k mnopqrstuvw	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 sum duplicate elements unique vertcat swap	ndgrid {} urifread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,)	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample std / cov strrep stripust
f ghi k mnopqrstuvwx	find logical / cell2mat horzcat input inpu	ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,)	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample stid / cov strrep strjust deblank / symmetric range
f ghijkl mnopqrst uvwxyz	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 sum duplicate elements unique vertcat swap	ndgrid {} urifread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,)	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample std / cov strrep stripust
f ghii kl mnopqrst uvwxyz{	find logical / cell2mat horzcat input inpu	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')	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample stid / cov strrep strjust deblank / symmetric range  size  mat2cell(x,ones(size(x,1),1),size(x,2))
f ghii j k l m n o p q r s t u v w x y z {	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	ndgrid {} urifread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique('rows')	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample std / cov strrep strjust deblank / symmetric range  size  mat2cell(x,ones(size(x,1),1),size(x,2)) bitor
f ghiijkimnopqrstuvwxyz{ -}	find logical / cell2mat horzcat input inpu	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')	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	gammaln / betain hypergeom  conj / real and imag  log2 lcm  fix isprime / totient function primes randsample stid / cov strrep strjust deblank / symmetric range  size  mat2cell(x,ones(size(x,1),1),size(x,2))