, I		Х	Y	Z
	separator .' (transpose) / permute	rot90	system	full
	for	repmat	repelem (run-length decoding)	blanks
	specify outputs	display stack (debug)		fopen, fwrite, fclose
\$ %	specify inputs comment	class	char(vpa())	fopen, fread, fclose typecast
	alternative default input/output spec	intersect	and	bitand
	Not used. String delimiter		run-length encoding	now / clock
(	( ) assignment indexing / split	{ } assignment indexing	( ) assignment ind. with final : / split	( ) assignment ind. with initial : / split
) *	() reference indexing	{ } reference indexing kron	( ) reference ind. with final : matrix product	( ) reference ind. with initial :  Cartesian product
+	+	NOII	conv2	conv2(, 'same')
,		cos	sin	tan
-	- brook	setdiff	deconv	hitaat
;	break /	continue angle	pause matrix /	bitget unwrap
0	Not used	predefined literals	predefined literals	aa
1	Not used	predefined literals	predefined literals	
2	Not used Not used	predefined literals predefined literals	predefined literals predefined literals	
4	Not used	predefined literals	predefined literals	
5	Not used	predefined literals	predefined literals	
6	Not used	predefined literals	predefined literals	
7 8	Not used Not used	predefined literals predefined literals		
9	Not used	predefined literals		
Ĭ	colon (range)	linearize array	comma-separated list	bitset
; [		acos	asin	atan2
< =	==	min isequal	cummin strcmp	
>	>	max	cummax	
?	if		why	sparse
@	push "for" value / "while" index	push "for" index	perms	randperm
A B	all logical(dec2bin()-'0')	all(, 1) bin2dec(char(+'0'))	dec2base. Larger base, any symbols dec2bin	base2dec. Larger base, any symbols bin2dec
c		histcounts	im2col	im2col(, 'distinct')
D	disp(num2str(,)) / mat2str	disp(num2str())	sprintf / fprintf	disp
E F	multiply by 2	replace elements in array	exponents of prime fectorization	
G	Not used. False (literal)  Paste from clipboard G (user-input)	plot	exponents of prime factorization imwrite / imagesc / image / imshow	appearance of graphics / format
н	Paste from clipboard H	Copy to clipboard H	and a second sec	
ı	Paste from clipboard I	Copy to clipboard I	col2im	
	Paste from clipboard J	Copy to clipboard K		
K L	Paste from clipboard K Paste from clipboard L (multi-level)	Copy to clipboard K Copy to clipboard L (multi-level)	gallery	
м	Paste from clipboard M (function-input)	mode	g	
N	stack size	nchoosek (array)	NaN	isnan
O P	zeros	datestr	datenum	datevec
P Q	flip increment by 1	flipud accumarray	pi	pdist2 polyval / roots / polyfit
R	triu	triu(,1) / build matrix	tril	tril(,-1) / build matrix
s	sort	sortrows	circshift	sign
T U	Not used. True (literal) str2num / string to array / square	str2double	toeplitz	
v	num2str	SUZUOUDIC		
w	2 raised to input			
X	Not used	regexp	regexprep	ioinf
Υ	Not used		inf	isinf
zΓ	Not used			
z [	Not used Not used. Array delimiter	ind2sub		
] \	Not used. Array delimiter mod	mod(1)+1	matrix \	divisors
[ \ ]	Not used. Array delimiter	mod(1)+1 sub2ind		
[ \ ] ^	Not used. Array delimiter mod end (loops or conditional branches) .^	mod(1)+1	matrix \ matrix ^	divisors  Cartesian power
[ \ ]	Not used. Array delimiter mod	mod(1)+1 sub2ind	matrix ^ tic	Cartesian power toc
[ \ ] ~ = a	Not used. Array delimiter mod end (loops or conditional branches)	mod(1)+1 sub2ind sqrt	matrix ^ tic padarray / unpad array	Cartesian power
[               	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble	mod(1)+1 sub2ind sqrt while any(, 1)	matrix ^ tic padarray / unpad array strsplit	Cartesian power toc base2base
[                   	Not used. Array delimiter mod end (loops or conditional branches)	mod(1)+1 sub2ind sqrt while	matrix ^ tic padarray / unpad array	Cartesian power toc
[ \ ]^ a b c d e	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags	matrix *  tic padarray / unpad array strsplit strcat blkdiag	Cartesian power toc base2base strjoin
[\]^ abcdef	Not used. Array delimiter mod end (loops or conditional branches)  \[ \tilde{\text{N}} \] unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags strfind	matrix ^ tic padarray / unpad array strsplit strcat blkdiag factor	Cartesian power  toc base2base  strjoin gcd exp
[\]^ abcdef	Not used. Array delimiter mod end (loops or conditional branches) ^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat	mod(1)+1 sub2ind sgrt while any(, 1) cat diag / spdiags strfind ndgrid	matrix ^ tic padarray / unpad array strsplit strcat blkdiag factor gamma / gammainc / betainc	Cartesian power  toc base2base  strjoin gcd exp  gammain / betain
[\] abcdefghi	Not used. Array delimiter mod end (loops or conditional branches)  ^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags strfind ndgrid {} urfread	matrix ^ tic padarray / unpad array strsplit strcat blkdiag factor gamma / gammainc / betainc hankel imread	Cartesian power  toc base2base  strjoin gcd exp
[\]^ _ abcdefghij	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s')	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real	matrix ^ tic padarray / unpad array strsplit stroat blkdiag factor gamma / gammainc / betainc hankel imread imag	Cartesian power  toc base2base  strjoin gcd exp  gammain / betain
[\]^ _ abcdefghijk	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input('s') lower / floor	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags strfind ndgrid {} urlread real upper / ceil	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  factor gamma / gammainc / betainc hankel imread imrag closest values	Cartesian power  toc base2base  strjoin gcd exp gammain / betain hypergeom conj
[\\] abcdefghij	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s')	mod(1)+1 sub2ind sqrt while any(, 1) cat diag / spdiags strfind ndgrid {} uriread real upper / ceil clamp (limit to a range)	matrix ^ tic padarray / unpad array strsplit stroat blkdiag factor gamma / gammainc / betainc hankel imread imag	Cartesian power  toc base2base  strjoin gcd exp  gammaln / betaln hypergeom
[\\]^ \cdefghijkImn	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input,'s') lower / floor ones ismember numel / size	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(,'rows') nchoosek (numbers) / multinomial c.	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  factor gamma / gammainc / betainc hankel imread imread imag closest values log. With two inputs, specifies base mean poly / interp1	Cartesian power  toc base2base  strjoin gcd exp  gammaln / betaln hypergeom  conj  log2 licm
[\]^ abcdefghijkImno	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismembr size double / cell array to numeric / parity	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  factor gamma / gammainc / betainc hankel imread imrag closest values log. With two inputs, specifies base mean poly / interp1 round / change case	Cartesian power  toc base2base  strjoin gcd exp  gammaln / betaIn hypergeom  conj  log2 lcm  fix
[\]^ abcdefghijkImnop	Not used. Array delimiter mod end (loops or conditional branches) A unary minus 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	mod(1)+1 sub2ind sqrt  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,)	matrix ^  tic padarray / unpad array strsplit stroat blkdiag  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 gcd exp gammain / betain hypergeom  conj log2 lcm fix isprime / totient function
[\]^ abcdefghijkImno	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismembr size double / cell array to numeric / parity	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind ndgrid {} urlread real upper / ceil clamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  factor gamma / gammainc / betainc hankel imread imrag closest values log. With two inputs, specifies base mean poly / interp1 round / change case	Cartesian power  toc base2base  strjoin gcd exp  gammaln / betaIn hypergeom  conj  log2 lcm  fix
[\]^ _ abcdefghijkImnopqrs	Not used. Array delimiter mod end (loops or conditional branches) A unary minus 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	mod(1)+1 sub2ind sqrt  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	matrix ^  tic padarray / unpad array strsplit strcat blkdiag 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 gcd exp gammaln / betaln hypergeom  conj log2 lcm fix isprime / totient function primes randsample std / cov
[   A - abcdefgh;   k   mnopqrst	Not used. Array delimiter mod end (loops or conditional branches)  ^ unary minus 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	mod(1)+1 sub2ind sqrt  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,)	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  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	Cartesian power  toc base2base  strjoin gcd exp gammaln / betaln hypergeom  conj  log2 lcm  fix isprime / totient function primes randsample std / cov strrep
[     ^   abcdefgh;   k   mnopqrstu	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus 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	mod(1)+1 sub2ind sub2ind sqrt  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	matrix ^  tic padarray / unpad array strsplit strstreat blkdiag  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 gcd exp  gammaIn / betaIn hypergeom  conj  log2 lcm  fix isprime / totient function primes randsample std / cov strrep strjust
[     ^ _ abcdefghi   k   mnopqrstuv	Not used. Array delimiter mod end (loops or conditional branches)  ^ unary minus 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	mod(1)+1 sub2ind sqrt  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,)	matrix ^  tic padarray / unpad array strsplit strcat blkdiag  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	Cartesian power  toc base2base  strjoin gcd exp gammaln / betaln hypergeom  conj  log2 lcm  fix isprime / totient function primes randsample std / cov strrep
	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus 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 verscap delete from stack	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind ndgrid {,} urlread real upper / ceil catamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) unique(,'rows')	matrix ^  tic padarray / unpad array strsplit strcat blkdiag 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 gcd exp  gammaln / betaln hypergeom  conj  log2 licm  fix isprime / totient function primes randsample std / cov strrep strjust deblank / symmetric range
[     ^ _ abcdefghi   k   mnopqrstuvwxy	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismemel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element	mod(1)+1 sub2ind sqrt  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')	matrix ^  tic padarray / unpad array strsplit strstreat blkdiag  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 gcd exp  gammain / betain hypergeom  conj  log2 lcm  fix isprime / totient function primes randsample std / cov strrep stripust
[     ^   abcdefgh;   k  mnopqrstuvwxyz	Not used. Array delimiter mod end (loops or conditional branches) A unary minus do., while 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	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind ndgrid {,}  urfread real lclamp (limit to a range) ismember(, rows') nchoosek (numbers) / multinomial c. int64 prod(, 1,) quantile randn sum(, 1,) quantile randn sum(, 1,) unique(,'rows')	matrix ^  tic padarray / unpad array strsplit stroat blkdiag  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 gcd exp gammaln / betaln hypergeom  conj  log2 lcm  fix isprime / totient function primes randsample strd / cov strrep strjust deblank / symmetric range
[     ^   abcdefghi   k   mnopqrstuvwxyz{	Not used. Array delimiter mod end (loops or conditional branches) .^ unary minus dowhile any bubble char (also for cell array) diff reshape / squeeze find logical / cell2mat horzcat input input(,'s') lower / floor ones ismemel / size double / cell array to numeric / parity prod decrement by 1 rand sum duplicate elements unique vertcat swap delete from stack duplicate element	mod(1)+1 sub2ind sqrt  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')	matrix ^  tic padarray / unpad array strsplit strcat blkdiag 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 gcd exp  gammaln / betaln hypergeom  conj  log2 licm  fix isprime / totient function primes randsample std / cov strrep strjust deblank / symmetric range
[   A - abcdefgh; k  mnopgrstuvwxyz{ -}	Not used. Array delimiter mod end (loops or conditional branches)  A unary minus 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	mod(1)+1 sub2ind sqrt  while any(, 1)  cat diag / spdiags  strfind 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')  clc eye eye nonzeros / remove whitespace num2cell	matrix ^  tic padarray / unpad array strsplit strcat blkdiag factor gamma / gammainc / betainc hankel imread imag closest values losest values losest values losest values mean poly / interp1 round / change case cumprod n-th prime / next prime randi cumsum  eig / svd / strtrim  hypot mat2cell	Cartesian power  toc base2base  strjoin gcd exp  gammaln / betaln hypergeom  conj  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))