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MATRIXx Information

Transitioning Xmath Operators and Variables to MATLAB

Permanent Variables	Xmath	MATLAB	Notes
precision of machine	eps	eps	both: 2.2204e-016
global error status	err	n/a	
largest finite number	huge	realmax	REALMAX is four times larger than huge
infinity	inf	inf, Inf	
sqrt(-1)	jay	i, j	
Not-A-Number	nan	NaN	
empty object	null	[]	ex: variable = [];
Pi	pi	pi	
smallest nonzero number	tiny	realmin	both: 2.2251e-308
Operators – Math and Logical	Xmath	MATLAB	Notes
and	&	&	
or			
not	!	~	
addition	+	+	
subtraction	-	-	
multiplication	*	*	
right division	/	/	
left division	\	\	
transpose	'	'	
elementwise multiplication	.*	.*	
elementwise right division	./	./	
elementwise left division	.\	.\	
Kronecker product	.*	kron	
Kronecker right division	./	NONE	
Kronecker left division	.\	NONE	
less than	<	<	
greater than	>	>	
less than or equal	<=	<=	
greater than or equal	>=	>=	
equality	==	==	
not equal	<>	~=	
power	** , ^	^	
complex conjugate transpose	*	'	
decimal	.	.	
Partition delimiter	.	NONE	MATLAB does not have partitions
raise elements to a power	.**	^	
raise elements to a power	^	^	
Hermitian (complex conjugate) transpose	**	NONE	
indexing and precedence	()	()	Index into matrix OR Indicate order of operations
matrix construction and concatenation	[]	[]	See also STRCAT and STRVCAT for string concatenation
keyword delimiters for functions	{}	NONE	
indexing	:	:	

show output	?	NONE	MATLAB will display results if a trailing semicolon is not present
separator	,	,	
separate rows, suppress output	;	;	
ellipsis	
equal	=	=	
capture error	===	lasterr, & try, catch	
delineate string	"	"	
insert double quote in string	""	"	MATLAB needs two single quotes (") to insert a single quote into a string
comment	#	%	
block comments	#{.....} #	NONE	
root Xmath directory	\$XMATH	\$MATLAB	
last command recall	@	Command History Window	
run command	@num	Double click command in Command History Window	
run commands	@num:p	Highlight and run commands from Command History	
execute the most recent command starting with "str"	@str	Type str, then Up-arrow	
list all commands starting with "str"	@str:l	Command History Window	
list the most recent command starting with "str"	@str:p	Command History Window	
list all commands	@:l	Command History Window	
execute the most recent command	@@	Up-arrow, then Enter	
list the most recent command	@@:p	Up-arrow, then Enter	