2.1a)

Jkl will be an array numbers increasing by 1 each element from 0 to6.

Jkl will change to an array of numbers increasing by 4 from 2 to 17.

Jkl will change to an array of numbers decreasing by 1 from 99 to 88.

Ttt will be an array of numbers increasing by 1/9 from 2 to 4.

Tpi will be an array of number increasing by 0.1 from 0 to 2 in which each element in the array is multiplied by pi.

2.1b)

xx(4:6) gives array values for elements 4-6 of array xx.

Size(xx) gives the starting array element number and ending array element number.

Length(xx) gives the amount of array elements.

xx(2:2:length(xx)) gives the array values of xx from 2 to length(xx) every 2 elements.

2.1c)

xx(2:2:length(xx))= pi^pi

2.2a)

Since xk is equal to an equation that includes a array of numbers, it has an array of values. Xk(1) is 0.7071. xk(0) is defined.

2.2b)

If yy(k) is written instead, it will put the values in elements -5 to 5 instead of 1 to 11.

2.2c)(copied)

Matrix multiplication.

X\*Y is the matrix product of X and Y. Any scalar (a 1-by-1 matrix)

may multiply anything. Otherwise, the number of columns of X must

equal the number of rows of Y.

.\* Array multiplication

X.\*Y denotes element-by-element multiplication. X and Y

must have the same dimensions unless one is a scalar.

A scalar can be multiplied into anything.

2.2d)

Ae^(j\*Theta) = Acos(Theta)+jsin(Theta). Since Acos(Theta) is the real part of zz, the real part of zz is a sinusoid. Phi = pi/2 and A = 1.4

Stuff:

Warning: Directory permission denied: C:\Users\dstout2\Desktop\ece 2610 lab 9

Warning: Name is nonexistent or not a directory: Z:\spfirst

Academic License

>> jkl=0:6

jkl =

0 1 2 3 4 5 6

>> jkl=2:4:17

jkl =

2 6 10 14

>> jkl=99:-1:88

jkl =

99 98 97 96 95 94 93 92 91 90 89 88

>> ttt=2:(1/9):4

ttt =

Columns 1 through 13

2.0000 2.1111 2.2222 2.3333 2.4444 2.5556 2.6667 2.7778 2.8889 3.0000 3.1111 3.2222 3.3333

Columns 14 through 19

3.4444 3.5556 3.6667 3.7778 3.8889 4.0000

>> tpi=pi\*[:0.1:2];

tpi=pi\*[:0.1:2];

|

Error: Unexpected MATLAB operator.

>> tpi=pi\*[:0.1:2];

tpi=pi\*[:0.1:2];

|

Error: Unexpected MATLAB operator.

>> tpi=pi\*[0:0.1:2];

>> xx=(4:6)

xx =

4 5 6

>> xx = [zerps(1,3), linspace(0,1,5), ones(1,4)]

Undefined function or variable 'zerps'.

Did you mean:

>> xx = [zeros(1,3), linspace(0,1,5), ones(1,4)]

xx =

Columns 1 through 9

0 0 0 0 0.2500 0.5000 0.7500 1.0000 1.0000

Columns 10 through 12

1.0000 1.0000 1.0000

>> xx(4:6)

ans =

0 0.2500 0.5000

>> size(xx)

ans =

1 12

>> length(xx)

ans =

12

>> xx(2:2:length(xx))

ans =

0 0 0.5000 1.0000 1.0000 1.0000

>> yy=xx

yy =

Columns 1 through 9

0 0 0 0 0.2500 0.5000 0.7500 1.0000 1.0000

Columns 10 through 12

1.0000 1.0000 1.0000

>> yy(4:6)=pi\*(1:3)

yy =

Columns 1 through 9

0 0 0 3.1416 6.2832 9.4248 0.7500 1.0000 1.0000

Columns 10 through 12

1.0000 1.0000 1.0000

>> help vector replacement

Error using help (line 49)

Help only supports one topic

>> help

HELP topics:

hwcosim\xtremedspkit - (No table of contents file)

hwcosim\jtag - (No table of contents file)

hwcosim\network\_ethernet - (No table of contents file)

hwcosim\pp\_ethernet - (No table of contents file)

plugins\bin - (No table of contents file)

examples\demos - (No table of contents file)

ids\bin - (No table of contents file)

sysgen\bin - Xilinx System Generator

bin\nt64 - (No table of contents file)

matlab\demos - Examples.

matlab\graph2d - Two dimensional graphs.

matlab\graph3d - Three dimensional graphs.

matlab\graphics - Handle Graphics.

graphics\obsolete - (No table of contents file)

matlab\plottools - Graphical plot editing tools

matlab\scribe - Annotation and Plot Editing.

scribe\obsolete - (No table of contents file)

matlab\specgraph - Specialized graphs.

matlab\uitools - Graphical user interface components and tools

uitools\obsolete - (No table of contents file)

hardware\stubs - (No table of contents file)

matlab\images - (No table of contents file)

toolbox\local - General preferences and configuration information.

matlab\optimfun - Optimization and root finding.

matlab\codetools - Commands for creating and debugging code

matlab\datafun - Data analysis and Fourier transforms.

matlab\datamanager - (No table of contents file)

matlab\datastoreio - (No table of contents file)

matlab\datatypes - Data types and structures.

matlab\elfun - Elementary math functions.

matlab\elmat - Elementary matrices and matrix manipulation.

matlab\funfun - Function functions and ODE solvers.

matlab\general - General purpose commands.

matlab\guide - Graphical user interface design environment

matlab\helptools - Help commands.

matlab\iofun - File input and output.

matlab\lang - Programming language constructs.

matlab\mapreduceio - (No table of contents file)

matlab\matfun - Matrix functions - numerical linear algebra.

matlab\ops - Operators and special characters.

matlab\polyfun - Interpolation and polynomials.

matlab\randfun - Random matrices and random streams.

matlab\sparfun - Sparse matrices.

matlab\specfun - Specialized math functions.

matlab\strfun - Character strings.

matlab\testframework - (No table of contents file)

matlab\timefun - Time and dates.

matlab\verctrl - Version control.

matlab\winfun - Windows Operating System Interface Files (COM/DDE)

winfun\net - Using .NET from within MATLAB

simulink\components - Simulink components.

simulink\dee - Differential Equation Editor

asap2\asap2 - (No table of contents file)

asap2\user - (No table of contents file)

can\blocks - (No table of contents file)

common\tgtcommon - (No table of contents file)

rtw\misra - (No table of contents file)

coder\simulinkcoder - Simulink Coder

targets\pil - (No table of contents file)

coder\advisor - (No table of contents file)

autosar\autosar - (No table of contents file)

rtw\accel - (No table of contents file)

coder\simulinkcoder\_core - (No table of contents file)

rtw\rtwdemos - Simulink Coder Demos

rtwdemos\rsimdemos - (No table of contents file)

blocks\library - (No table of contents file)

library\simulinkcoder - (No table of contents file)

blocks\obsolete - (No table of contents file)

simulink\blocks - Simulink block library.

simulink\simulink - Simulink

simulink\mplayio - (No table of contents file)

simulink\simdemos - Simulink examples

simdemos\aerospace - (No table of contents file)

simdemos\automotive - (No table of contents file)

automotive\powerwindow - (No table of contents file)

simdemos\simfeatures - (No table of contents file)

simfeatures\modelreference - (No table of contents file)

simfeatures\datadictionary - (No table of contents file)

automotive\fuelsys - (No table of contents file)

simdemos\simgeneral - (No table of contents file)

simulink\hmi - (No table of contents file)

simulink\modeladvisor - (No table of contents file)

modeladvisor\fixpt - (No table of contents file)

simulink\frameedit - (No table of contents file)

dastudio\depviewer - (No table of contents file)

stateflow\stateflow - Stateflow

stateflow\sfdemos - Stateflow examples and samples.

matlab\apps - (No table of contents file)

matlab\audiovideo - Audio and Video support.

bioinfo\bioinfo - Bioinformatics Toolbox

bioinfo\biolearning - Bioinformatics Toolbox -- Statistical Learning functions.

bioinfo\microarray - Bioinformatics Toolbox -- Microarray support functions.

bioinfo\mass\_spec - Bioinformatics Toolbox -- Mass spectrometry data analysis functions.

bioinfo\proteins - Bioinformatics Toolbox -- Protein analysis tools.

bioinfo\biomatrices - Bioinformatics Toolbox -- Sequence similarity scoring matrices.

bioinfo\graphtheory - Bioinformatics Toolbox -- Graph Theory functions.

bioinfo\biodemos - Bioinformatics Toolbox -- Tutorials, demos and examples.

coder\codegendemos - (No table of contents file)

coder\connectivity - (No table of contents file)

coder\coverage - (No table of contents file)

rtw\rtw - (No table of contents file)

tools\registry - (No table of contents file)

foundation\tfl - (No table of contents file)

autosar4p0\ifx - (No table of contents file)

autosar4p0\ifl - (No table of contents file)

tfl\gui - (No table of contents file)

coder\matlabcoder - MATLAB Coder

comm\comm - Communications System Toolbox

commutilities\comminit - (No table of contents file)

commutilities\commmex - (No table of contents file)

comm\commutilities - (No table of contents file)

comm\commdeprecated - Archived MATLAB Files from Communications System Toolbox.

comm\commdemos - Communications System Toolbox Demos.

comm\examples - Communications Toolbox Documentation Examples.

shared\comparisons - (No table of contents file)

connector\connector - connector Enable or disable the MATLAB Connector. The MATLAB Connector allows you to access a MATLAB session on a desktop from a mobile device using MATLAB Mobile.

control\control - Control System Toolbox

control\ctrlguis - Control System Toolbox -- Visualization and plot manipulation.

control\ctrlobsolete - Control System Toolbox -- obsolete commands.

control\ctrlutil - Control System Toolbox -- Utilities and MEX files.

control\ctrldemos - Control System Toolbox -- Demos.

curvefit\curvefit - Curve Fitting Toolbox

curvefit\splines - Curve Fitting Toolbox -- Spline Functions

curvefit\cftoolgui - Curve Fitting Toolbox -- Curve Fitting Tool

curvefit\curvefitdemos - Curve Fitting Toolbox -- Examples

daq\daq - Data Acquisition Toolbox

daqblks\daqblks - (No table of contents file)

daq\daqguis - Data Acquisition Toolbox - Data Acquisition Soft Instruments.

daq\daqdemos - Data Acquisition Toolbox - Data Acquisition Demos.

toolbox\distcomp - Parallel Computing Toolbox

distcomp\distcomp - (No table of contents file)

distcomp\user - (No table of contents file)

distcomp\mpi - Parallel Computing Functions for Message Passing

distcomp\parallel - Parallel Algorithms

parallel\util - (No table of contents file)

distcomp\lang - Parallel computing programming language constructs.

distcomp\cluster - Functions and Classes for Parallel Computing with Clusters

distcomp\gpu - There are several options available for using your computer's graphics

distcomp\pctdemos - (No table of contents file)

dsp\dsp - DSP System Toolbox

dsp\dsputilities - (No table of contents file)

dsputilities\dspinit - (No table of contents file)

dsputilities\dspmex - (No table of contents file)

dsp\dspdemos - DSP System Toolbox demonstrations and examples.

dsp\dspdeployabledemos - (No table of contents file)

dsp\examples - (No table of contents file)

eml\eml - (No table of contents file)

dsp\filterdesign - (No table of contents file)

fixedpoint\fixedpointtool - (No table of contents file)

fixedpoint\fidemos - (No table of contents file)

fixedpoint\fixedpoint - (No table of contents file)

toolbox\fixpoint - Fixed-Point Designer

fixpoint\fpca - (No table of contents file)

fixedandfloat\fxpdemos - Fixed-Point Designer Demos

fuzzy\fuzzy - Fuzzy Logic Toolbox

fuzzy\fuzzyutil - (No table of contents file)

fuzzy\fuzdemos - Fuzzy Logic Toolbox Demos.

globaloptim\globaloptim - Global Optimization Toolbox

globaloptim\globaloptimdemos - Global Optimization Toolbox Demos

glue\studio - (No table of contents file)

hdllib\ml\_lib - (No table of contents file)

hdllib\sl\_lib - (No table of contents file)

eclipseide\mdlinfo - (No table of contents file)

eclipseide\tfl - (No table of contents file)

ticcs\ccsblks - (No table of contents file)

ticcs\ccslinkblks - (No table of contents file)

ccslinkblks\rtdxsimblks - (No table of contents file)

ticcs\mdlinfo - (No table of contents file)

ticcs\tfl - (No table of contents file)

ticcs\util - (No table of contents file)

ticcs\envchecker - (No table of contents file)

foundation\pjtgenerator - (No table of contents file)

pjtgenerator\tgtpref2 - (No table of contents file)

pjtgenerator\mdlinfo - (No table of contents file)

pjtgenerator\blks - (No table of contents file)

blks\masks - (No table of contents file)

foundation\util - (No table of contents file)

foundation\errorhandler - (No table of contents file)

foundation\xmakefile - (No table of contents file)

foundation\hookpoints - (No table of contents file)

idelink\idelinkdemos - (No table of contents file)

ticcs\ccsdemos - (No table of contents file)

ccsdemos\util - (No table of contents file)

ident\ident - System Identification Toolbox

ident\nlident - Nonlinear System Identification features. Type "help ident" for more info.

ident\idobsolete - (No table of contents file)

ident\idguis - (No table of contents file)

ident\idutils - (No table of contents file)

ident\iddemos - (No table of contents file)

iddemos\examples - (No table of contents file)

images\colorspaces - Image Processing Toolbox --- colorspaces

images\images - Image Processing Toolbox

images\imdata - Image Processing Toolbox --- sample images

images\imuitools - Image Processing Toolbox --- imuitools

images\iptformats - Image Processing Toolbox --- File Formats

images\iptutils - Image Processing Toolbox --- utilities

matlab\imagesci - (No table of contents file)

images\imdemos - Image Processing Toolbox --- demos

instrument\instrument - Instrument Control Toolbox

instrumentblks\instrumentblks - (No table of contents file)

instrumentblks\instrumentmex - (No table of contents file)

instrumentblks\instrumentmasks - (No table of contents file)

instrument\instrumentdemos - (No table of contents file)

shared\instrument - (No table of contents file)

shared\m3i - (No table of contents file)

shared\mldatx - (No table of contents file)

matlab\networklib - Network support.

toolbox\nnet - Neural Network Toolbox

nnet\nncontrol - Neural Network Toolbox Control System Functions.

nnet\nnadapt - Neural Network Toolbox Adapt Functions.

nnet\nndatafun - Neural Network Toolbox Data Functions.

nnet\nnderivative - Neural Network Toolbox Calculation Functions.

nnet\nndistance - Neural Network Toolbox Distance Functions.

nnet\nndivision - Neural Network Toolbox Division Functions.

nnet\nninitlayer - Neural Network Toolbox Layer Initialization Functions.

nnet\nninitnetwork - Neural Network Toolbox Network Initialization Functions.

nnet\nninitweight - Neural Network Toolbox Weight Initialization Functions.

nnet\nnlearn - Neural Network Toolbox Learning Functions.

nnet\nnnetfun - Neural Network Toolbox Network Functions.

nnet\nnnetinput - Neural Network Toolbox Net Input Functions.

nnet\nnnetwork - Neural Network Toolbox Network Creation Functions.

nnet\nnperformance - Neural Network Toolbox Performance Functions.

nnet\nnplot - Neural Network Toolbox Plot Functions.

nnet\nnprocess - Neural Network Toolbox Processing Functions.

nnet\nnsearch - Neural Network Toolbox Line Search Functions.

nnet\nntopology - Neural Network Toolbox Topology Functions.

nnet\nntrain - Neural Network Toolbox Training Functions.

nnet\nntransfer - Neural Network Toolbox Transfer Functions.

nnet\nnweight - Neural Network Toolbox Weight Functions.

nnet\nnguis - Neural Network Toolbox GUI Functions.

nnet\nnobsolete - Neural Network Toolbox Obsolete Functions

nnet\nnutils - Neural Network Toolbox Utility Functions

nnet\nndemos - Neural Network Demonstrations and Applications

nndemos\nndatasets - Neural Network Datasets

optim\optim - Optimization Toolbox

optim\optimdemos - Demonstrations.

toolbox\pde - Partial Differential Equation Toolbox

pde\pdedemos - Partial Differential Equation Toolbox Examples

mli\m - (No table of contents file)

mli\m - (No table of contents file)

mli\m - (No table of contents file)

mech\mech - (No table of contents file)

mech\importer - (No table of contents file)

mech\mechdemos - SimMechanics Demos.

network\_engine\network\_engine - (No table of contents file)

ne\_sli\ne\_sli - (No table of contents file)

pm\_sli\pm\_sli - (No table of contents file)

simscape\simscapedemos - (No table of contents file)

foundation\simscape - Simscape

library\m - (No table of contents file)

simscape\m - (No table of contents file)

smdemos\cart\_double\_pendulum - (No table of contents file)

smdemos\stewart\_platform - (No table of contents file)

smdemos\double\_crank\_aiming - (No table of contents file)

smdemos\double\_wishbone\_suspension - (No table of contents file)

smdemos\robotic\_wrist - (No table of contents file)

smdemos\welding\_robot - (No table of contents file)

smdemos\potters\_wheel - (No table of contents file)

smdemos\linear\_actuator - (No table of contents file)

smdemos\pto\_shaft - (No table of contents file)

foundation\mech - SimMechanics

import\m - (No table of contents file)

sli\m - (No table of contents file)

sm\m - (No table of contents file)

codeinstrum\codeinstrum - (No table of contents file)

interfaces\python - (No table of contents file)

realtime\realtime - Run Simulink model on target hardware

robust\robust - Robust Control Toolbox

robust\rctlmi - Robust Control Toolbox - LMI Solvers.

robust\rctutil - (No table of contents file)

robust\rctguis - (No table of contents file)

rctobsolete\lmi - (No table of contents file)

mutools\commands - (No table of contents file)

mutools\subs - Utilities for obsolete MUTOOLS commands.

robust\rctdemos - Robust Control Toolbox -- Demos.

blocks\sb2sl - (No table of contents file)

shared\can - (No table of contents file)

can\canblks - (No table of contents file)

can\canmasks - (No table of contents file)

can\canmex - (No table of contents file)

controllib\engine - Control Library - Engine.

engine\numerics - (No table of contents file)

engine\options - (No table of contents file)

engine\blocks - (No table of contents file)

controllib\general - Control System Toolbox -- General Utilities.

controllib\graphics - Control Library - Graphics.

graphics\utils - (No table of contents file)

graphics\plotoptions - (No table of contents file)

controllib\requirements - Control Library - Design Requirements.

shared\dastudio - (No table of contents file)

dspblks\dspblks - (No table of contents file)

dsp\dialog - (No table of contents file)

utilities\init - (No table of contents file)

eda\board - (No table of contents file)

eda\fil - FPGA-in-the-Loop verifies FPGA designs in Simulink and MATLAB with an

fil\filmapi - (No table of contents file)

eda\fpgaautomation - HDL Verifier for Xilinx FPGA design automation

shared\filterdesignlib - (No table of contents file)

shared\hdlshared - HDL Library

hdlshared\hdlshared\_gui - (No table of contents file)

shared\imageslib - Image Processing Toolbox Library

shared\measure - (No table of contents file)

shared\optimlib - Optimization Toolbox Library

shared\pdelib - PDE Toolbox Library

slvnv\reqmgt - Requirements Management Interface.

reqmgt\rtexplorer - Subdirectory "RTExplorer" - RMI data serialization infrastructure

shared\rptgen - (No table of contents file)

shared\sigbldr - (No table of contents file)

shared\siglib - (No table of contents file)

sysarch\sysarch - (No table of contents file)

shared\slcontrollib - Simulink Control Design Library

shared\sldv - sldvisactive - Check if Simulink Design Verifier software is analyzing model

shared\slvnv - (No table of contents file)

slvnv\simcoverage - (No table of contents file)

shared\spcuilib - (No table of contents file)

shared\statslib - Statistics and Machine Learning Toolbox Library

testmeaslib\simulink - (No table of contents file)

shared\xcp - XCP functionality is provided as part of Vehicle Network Toolbox.

xcp\xcpblks - (No table of contents file)

xcp\xcpmasks - (No table of contents file)

xcp\xcpmex - (No table of contents file)

signal\signal - Signal Processing Toolbox

signal\sigtools - (No table of contents file)

signal\sptoolgui - (No table of contents file)

signal\sigdemos - (No table of contents file)

simbio\simbio - SimBiology

simbio\simbiodemos - SimBiology Demos

simevents\simevents - SimEvents

simevents\examples - SimEvents Demos.

sl3d\sl3d - (No table of contents file)

sl3d\sl3ddemos - Simulink 3D Animation examples.

slcontrol\slcontrol - Simulink Control Design

slcontrol\slctrlguis - (No table of contents file)

slcontrol\slctrlutil - (No table of contents file)

slcontrol\slctrlobsolete - (No table of contents file)

slcontrol\slctrldemos - (No table of contents file)

sldv\sldv - (No table of contents file)

slproject\examples - (No table of contents file)

simulink\sl\_async\_streaming - (No table of contents file)

simulink\fixedandfloat - Fixed-Point Designer utilities.

fixedandfloat\obsolete - (No table of contents file)

iodata\iomap - (No table of contents file)

performance\performancea - (No table of contents file)

simharness\simharness - (No table of contents file)

simulink\upgradeadvisor - (No table of contents file)

stats\stats - Statistics and Machine Learning Toolbox

stats\classreg - (No table of contents file)

stats\clustering - (No table of contents file)

stats\statsdemos - Statistics and Machine Learning Toolbox --- Demos

stats\mlearnapp - Statistics and Machine Learning Toolbox

symbolic\symbolic - Symbolic Math Toolbox

symbolic\symbolicdemos - (No table of contents file)

target\codertarget - (No table of contents file)

intelhost\tfl - (No table of contents file)

foundation\utils - (No table of contents file)

utils\resource\_config - (No table of contents file)

blks\mex - (No table of contents file)

blks\masks - (No table of contents file)

ti\mdlinfo - (No table of contents file)

ti\utils - (No table of contents file)

blks\masks - (No table of contents file)

etargets\etargets - (No table of contents file)

etargets\demoutils - (No table of contents file)

target\targetdemos - (No table of contents file)

processor\tic2000 - (No table of contents file)

tic2000\utils - (No table of contents file)

blks\masks - (No table of contents file)

tic5000\tic5000demos - (No table of contents file)

processor\tic6000 - (No table of contents file)

tic6000\tfl - (No table of contents file)

tic6000\utils - (No table of contents file)

blks\masks - (No table of contents file)

blks\mex - (No table of contents file)

blks\masks - (No table of contents file)

matlab\timeseries - Time series data visualization and exploration.

matlab\hds - (No table of contents file)

matlab\toolbox\_packaging - (No table of contents file)

vision\vision - Computer Vision System Toolbox

vision\visionutilities - (No table of contents file)

visionutilities\visioninit - (No table of contents file)

visionutilities\visionmex - (No table of contents file)

vnt\vnt - Vehicle Network Toolbox

vnt\vntguis - (No table of contents file)

vntblks\vntblks - (No table of contents file)

vntblks\vntmasks - (No table of contents file)

vnt\vntdemos - (No table of contents file)

matlab\webcam - Webcam support.

webservices\restful - (No table of contents file)

interfaces\webservices - Web services interface.

>> xx(1:(if xx%2 == 1):12

xx(1:(if xx%2 == 1):12

|

Error: Illegal use of reserved keyword "if".

>> xx(2:2:length(xx)= pi^pi

xx(2:2:length(xx)= pi^pi

|

Error: The expression to the left of the equals sign is not a valid target for an assignment.

>> xx(2:2:length(xx))= pi^pi

xx =

0 36.4622 0 36.4622 0.2500 36.4622 0.7500 36.4622 1.0000 36.4622 1.0000 36.4622

>> xk-cos(pi\*(0.11)/4)

Undefined function or variable 'xk'.

>> xk=cos(pi\*(0.11)/4)

xk =

0.9963

>> xk=cos(pi\*(0:11)/4)

xk =

1.0000 0.7071 0.0000 -0.7071 -1.0000 -0.7071 -0.0000 0.7071 1.0000 0.7071 0.0000 -0.7071

>> yy(1:11)=cos((-5:5)\*pi/3)

yy =

Columns 1 through 9

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000 -1.0000

Columns 10 through 12

-0.5000 0.5000 1.0000

>> yy=[];

>> yy = [ ]; %<--- initialize the yy vector to be empty

for k=-5:5

yy(k+6) = cos( k\*pi/3 )

end

yy

yy =

0.5000

yy =

0.5000 -0.5000

yy =

0.5000 -0.5000 -1.0000

yy =

0.5000 -0.5000 -1.0000 -0.5000

yy =

0.5000 -0.5000 -1.0000 -0.5000 0.5000

yy =

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000

yy =

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000

yy =

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000

yy =

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000 -1.0000

yy =

Columns 1 through 9

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000 -1.0000

Column 10

-0.5000

yy =

Columns 1 through 9

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000 -1.0000

Columns 10 through 11

-0.5000 0.5000

yy =

Columns 1 through 9

0.5000 -0.5000 -1.0000 -0.5000 0.5000 1.0000 0.5000 -0.5000 -1.0000

Columns 10 through 11

-0.5000 0.5000

>> x = [-3 -1 0 1 3 ];

y = x.\*x - 3\*x;

plot( x, y )

z = x + y\*sqrt(-1)

plot( z )

z =

Columns 1 through 4

-3.0000 +18.0000i -1.0000 + 4.0000i 0.0000 + 0.0000i 1.0000 - 2.0000i

Column 5

3.0000 + 0.0000i

>> help arith

Arithmetic operators.

+ Plus.

X + Y adds matrices X and Y. X and Y must have the same

dimensions unless one is a scalar (a 1-by-1 matrix).

A scalar can be added to anything.

- Minus.

X - Y subtracts matrix X from Y. X and Y must have the same

dimensions unless one is a scalar. A scalar can be subtracted

from anything.

\* Matrix multiplication.

X\*Y is the matrix product of X and Y. Any scalar (a 1-by-1 matrix)

may multiply anything. Otherwise, the number of columns of X must

equal the number of rows of Y.

.\* Array multiplication

X.\*Y denotes element-by-element multiplication. X and Y

must have the same dimensions unless one is a scalar.

A scalar can be multiplied into anything.

^ Matrix power.

Z = X^y is X to the y power if y is a scalar and X is square. If y is an

integer greater than one, the power is computed by repeated

multiplication. For other values of y the calculation

involves eigenvalues and eigenvectors.

Z = x^Y is x to the Y power, if Y is a square matrix and x is a scalar,

computed using eigenvalues and eigenvectors.

Z = X^Y, where both X and Y are matrices, is an error.

.^ Array power.

Z = X.^Y denotes element-by-element powers. X and Y

must have the same dimensions unless one is a scalar.

A scalar can operate into anything.

>> mylab1

Error: File: mylab1.m Line: 4 Column: 15

The input character is not valid in MATLAB statements or expressions.

>> mylab1

Error: File: mylab1.m Line: 4 Column: 15

The input character is not valid in MATLAB statements or expressions.

>> mylab1

Error: File: mylab1.m Line: 4 Column: 15

The input character is not valid in MATLAB statements or expressions.

>> mylab1

Error: File: mylab1.m Line: 4 Column: 15

The input character is not valid in MATLAB statements or expressions.

>> mylab1

>> mylab1

>> mylab1

>> mylab1

>> mylab1

>> mylab1

>> text mylab1

Error using text

Invalid parameter/value pair arguments

>> type mylab1

tt = -1 : 0.01 : 1;

xx = cos( 5\*pi\*tt );

zz = 1.4\*exp(j\*pi/2)\*exp(j\*5\*pi\*tt);

plot( tt, xx, 'b-', tt, real(zz), 'r--' ), grid on

%<--- plot a sinusoid

title('TEST PLOT of a SINUSOID')

xlabel('TIME (sec)')

>> xpsound

>> tt = -1 : 0.01 : 1;

xx = cos( 5\*pi\*tt );

>> tt = 0:(1/fs):dur);

tt = 0:(1/fs):dur);

|

Error: Unbalanced or unexpected parenthesis or bracket.

>> tt = 0:(1/fs):dur;

Undefined function or variable 'fs'.

>> fs=11025

fs =

11025

>> tt = 0:(1/fs):dur;

Undefined function or variable 'dur'.

Did you mean:

>> tt = 0:(1/fs):.9;

>> xx = cos( 5\*pi\*tt );

>> soundsc(xx)

>> soundsc(tt)

>> xx = cos( 2000\*2\*pi\*tt );

>> soundsc(xx)

>>