MATLAB: University of California, Davis

Computer LAB for Linear Algebra   Dr. Daddel

MATH 22AL   LAB # 6

23   Using m-file to find a basis for null-space of AB

Then Save the file and exit pico. In your MATLAB enter matrix AB,
then type

type	`nulbasis(AB)`

The result will be a 7 by 4 matrix, columns of this matrix form an basis for the nullspace of AB.
Then enter your basis vectors as:

type	`% ABN1 = your first column vector of basis of nullspace of AB`
type	`% ABN2 = your second column vector of basis of nullspace of AB`
type	`% ABN3 = your third column vector of basis of nullspace of AB`
type	`% ABN4 = your third column vector of basis of nullspace of AB`

Now type these vectors without % as

type	`ABN1 = your first column vector of basis of nullspace of AB`
type	`ABN2 = your second column vector of basis of nullspace of AB`
type	`ABN3 = your third column vector of basis of nullspace of AB`
type	`ABN4 = your third column vector of basis of nullspace of AB`

then,

type	`NN= [ ABN1 ABN2 ABN3 ABN4]`

to get NN whose columns forming a Basis for nullspace of AB. So columns of NN are in nullspace of AB.

type	`OO= AB*NN`

to confirm that. Explain what you see and how did you confirm it.
Use, save, diary off, exit to end your lab, then use pico to edit it before submitting.

This is the end of the LAB.