MATLAB:
University of California, Davis

Computer LAB for Linear Algebra
Dr. Daddel

MATH 22AL   LAB # 10

1   Notes:

1. To see plots, you have to use one of the terminals in the Mathematics department computer lab. Connecting from home via ssh will not allow you to see plots.

2. Green typewriter text represents comments you must type. Each comment is worth one point.

3. Blue typewriter text represents commands you must type. Each command is worth one point. MATLAB is case-sensitive, so commands are case-sensitive as well.

4. Beware of typos! Also, do not copy and paste commands. Invisible Special characters are sometimes used (e.g. the left quote character) which MATLAB does not like.

2   Objectives

In this LAB you will explore the following topics using MATLAB.

- Real and Imaginary part of a Complex Number

- Complex numbers as vectors Geometric Representation

- Polar Representation of Complex numbers

- Arithmetic of Complex Numbers

- Conjugate of Complex Number.

- Matrices with Complex Entries,

- Conjugate of Complex Number, Conjugate of a matrix.

- Hermitian matrix

- Unitary matrix, Normal matrix

- Eigenvalue. and eigenvector