MATLAB programming course for beginners, supported by Wagatsuma Lab@Kyutech

Table of Contents

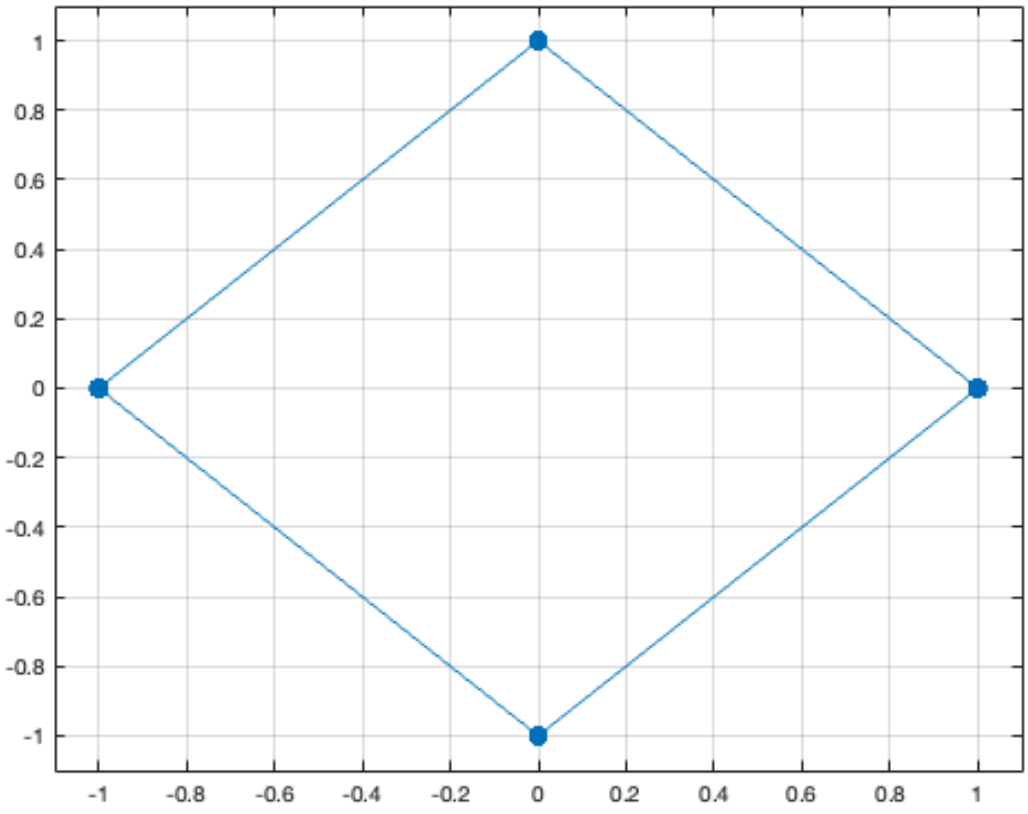
Specifications and requirements

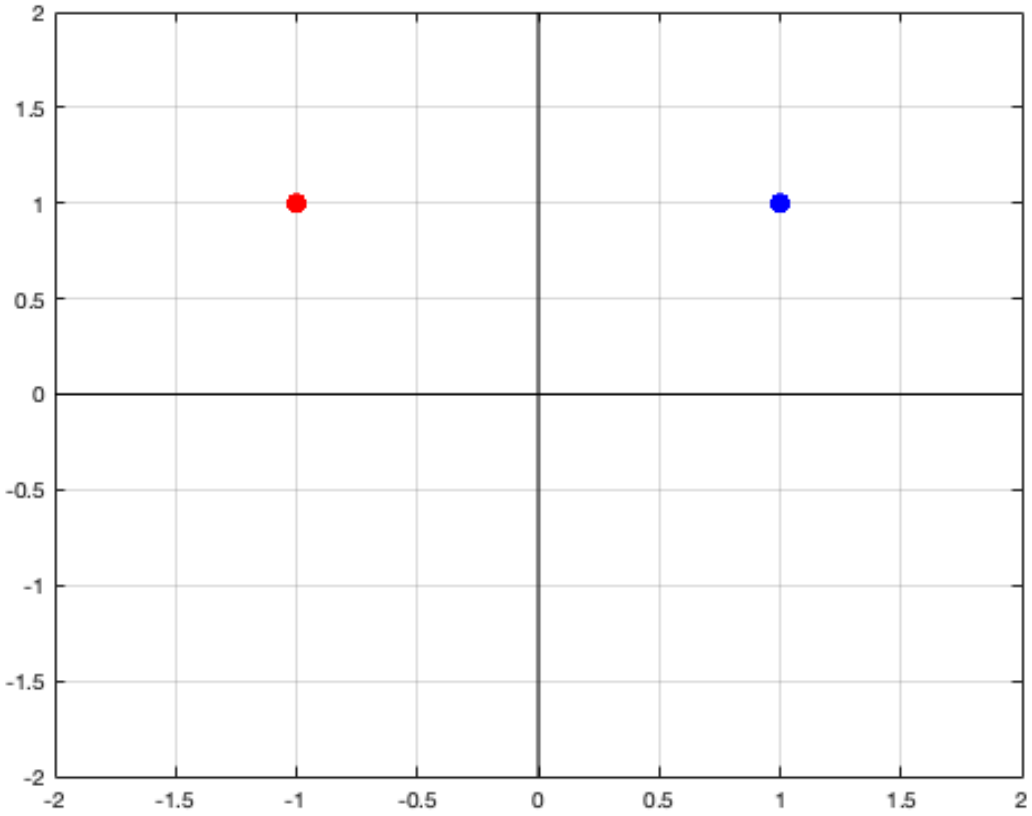
1. @Time : 2022-8-10
2. @Author : Hiroaki Wagatsuma
3. @Site : https://github.com/hirowgit/1A1_matlab_intermediate_course
4. @IDE : MATLAB R2022a
5. @File : lec0_step2.m

Main program

```
wd=4;
% t=0:2*pi/wd:2*pi+2*pi/wd;
t=0:2*pi/wd:2*pi;
x=cos(t);
y=sin(t);
```

```
figure(3); clf;
plot(x,y,'.-','MarkerSize',24);
grid on;
set(gca,'xlim',[-1.1 1.1],'ylim',[-1.1 1.1]);


syms A [2 2]
syms b [2 1]

A*b

Rt=@(th) [cos(th) -sin(th); sin(th) cos(th)];

xyD=[1;1];

xyD2=Rt(pi/2)*xyD;

figure(4); clf;
plot(xyD(1),xyD(2),'b.','MarkerSize',24),hold on;
plot(xyD2(1),xyD2(2),'r.','MarkerSize',24),hold on;
plot([-2 2],[0 0],'k-');
plot([0 0],[-2 2],'k-');

grid on;


ans =

A1_1*b1 + A1_2*b2
A2_1*b1 + A2_2*b2
```


1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1



Supplementary information to publish

If you want to make a pdf or html file on the code, you can use the code "x_publish_each_codes.m" in the same folder. Please change the file name as " this_file_tag='lec*_step*' " (* will be replaced to the number of the target file).

The code "x_publish_all_codes.m" works for such a publication applying to all codes in the same folder (Note: "x_publish_all_codes_sub.m" should be located in the same folder).

Published with MATLAB® R2022a