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

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### Specifications and requirements

1. @Time: 2022-8-10

2. @Author: Hiroaki Wagatsuma

3. @Site: <a href="https://github.com/hirowgit/1A1\_matlab\_intermediate\_course">https://github.com/hirowgit/1A1\_matlab\_intermediate\_course</a>

4. @IDE: MATLAB R2022a

5. @File: lec0\_step3.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);
```

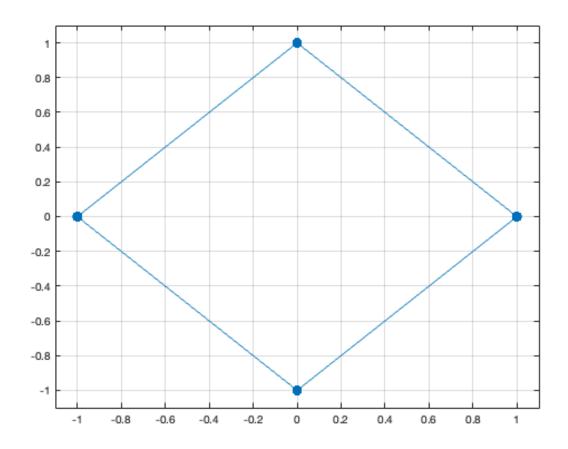
```
figure(3); clf;
plot(x,y,'.-','MarkerSize',24);
grid on;
set(gca,'xlim',[-1.1 1.1],'ylim',[-1.1 1.1]);

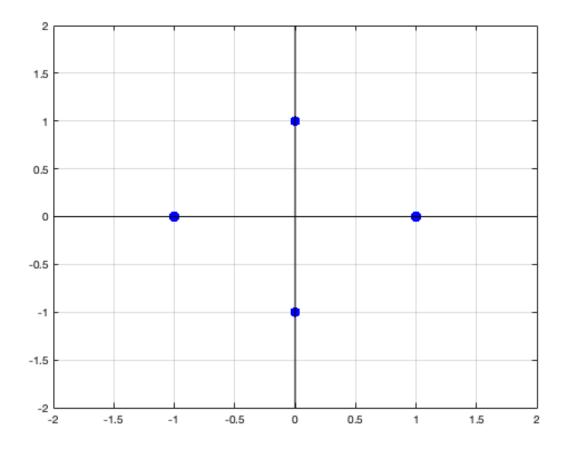
xyD=[x;y];

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

xyD2=Rt(pi/2)*xyD;

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





## 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).

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