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commandwindow

clear

clc

a=[1,-2,-1,3;2,3,0,1;1,0,-4,-2;0,-1,3,1]

eig(a)

output:

a =

1 -2 -1 3

2 3 0 1

1 0 -4 -2

0 -1 3 1

ans =

2.4323 + 2.2437i

2.4323 - 2.2437i

-1.9323 + 1.7651i

-1.9323 - 1.7651i

They system is unstable because there presence of both positive and negative eigen values

a =

1 -2 -1 3

2 3 0 1

1 0 -4 -2

0 -1 3 1

ans =

2.4323 + 2.2437i

2.4323 - 2.2437i

-1.9323 + 1.7651i

-1.9323 - 1.7651i

i =

0.0000 + 1.0000i