

EZEUBIA, CLEMENTINA ONYINYECHUKWU
17/ENG04/027

ENG 281 Assignment 4

- 1) Command Window
 - 2) clear
 - 3)clc
 - 4) $P = [1, -2, -1, 3; 2, 3, 0, 1; 1, 0, -4, -2; 0, -1, 3, 1]$
 - 5) eig(P)
 - 6) ~~Att~~ disp 'The system is unstable due to the presence of some positive.'
 - 7) ~~Att~~ eigenvectors
- \Rightarrow Output obtained

$$P = \begin{bmatrix} -1 & -2 & -1 & 3 \\ 2 & 3 & 0 & 1 \\ 1 & 0 & -4 & -2 \\ 0 & -1 & 3 & 1 \end{bmatrix}$$

$$\text{Ans} = \begin{bmatrix} 2.4323 + 2.2437i \\ 2.4323 - 2.2437i \\ -1.9323 + 1.7651i \\ -1.9323 - 1.7651i \end{bmatrix}$$

The system is unstable due to the presence of some positive eigenvalues