

1 Dimension: 3

2 Epsilon:1e-06

$$\left(\begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} + (1e-06) \begin{pmatrix} 1 & -1 & -1 \\ 1 & 1 & -1 \\ 1 & 1 & 1 \end{pmatrix}\right)x = \begin{pmatrix} -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:5.4114513925096235

3 Dimension: 3

4 Epsilon:1e-05

$$\left(\begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} + (1e-05) \begin{pmatrix} 1 & -1 & -1 \\ 1 & 1 & -1 \\ 1 & 1 & 1 \end{pmatrix}\right)x = \begin{pmatrix} -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:5.411246785600582

5 Dimension: 3

6 Epsilon:0.0001

$$\left(\begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} + (0.0001) \begin{pmatrix} 1 & -1 & -1 \\ 1 & 1 & -1 \\ 1 & 1 & 1 \end{pmatrix}\right)x = \begin{pmatrix} -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:5.409201784384474

7 Dimension: 3

8 Epsilon:0.001

$$\left(\begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} + (0.001) \begin{pmatrix} 1 & -1 & -1 \\ 1 & 1 & -1 \\ 1 & 1 & 1 \end{pmatrix}\right)x = \begin{pmatrix} -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:5.388858003640518

9 Dimension: 6

10 Epsilon:1e-06

$$\begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 0 & 1 & -1 & -1 & -1 & -1 \\ 0 & 0 & 1 & -1 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix} + (1e-06) \begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{pmatrix} x = \begin{pmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:69.8415813013427

11 Dimension: 6

12 Epsilon:1e-05

$$\begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 0 & 1 & -1 & -1 & -1 & -1 \\ 0 & 0 & 1 & -1 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix} + (1e-05) \begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{pmatrix} x = \begin{pmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:69.80552543514018

13 Dimension: 6

14 Epsilon:0.0001

$$\begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 0 & 1 & -1 & -1 & -1 & -1 \\ 0 & 0 & 1 & -1 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix} + (0.0001) \begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{pmatrix} x = \begin{pmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:69.44705155216691

15 Dimension: 6

16 Epsilon:0.001

$$\begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 0 & 1 & -1 & -1 & -1 & -1 \\ 0 & 0 & 1 & -1 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix} + (0.001) \begin{pmatrix} 1 & -1 & -1 & -1 & -1 & -1 \\ 1 & 1 & -1 & -1 & -1 & -1 \\ 1 & 1 & 1 & -1 & -1 & -1 \\ 1 & 1 & 1 & 1 & -1 & -1 \\ 1 & 1 & 1 & 1 & 1 & -1 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{pmatrix} x = \begin{pmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ 1 \end{pmatrix}$$

Condition number:66.05923671098316