ASSIGNMENT-5

Unnati Gupta

Download all python codes from

https://github.com/unnatigupta2320/Assignment_5/blob/master/codes.py

and latex-tikz codes from

https://github.com/unnatigupta2320/Assignment_5

1 Question No-2.104

Find the equation of the plane which is at a distance of 7 units from the origin and normal to $\mathbf{n} = \begin{pmatrix} 3 \\ 5 \\ -6 \end{pmatrix}$

2 Solution

Given that,

- The distance c= 7 units and,
- The normal vector to the plane is $\mathbf{n} = \begin{pmatrix} 3 \\ 5 \\ -6 \end{pmatrix}$.
- So,Equation of the plane is given by:-

$$\mathbf{n}^T\mathbf{x} = c \tag{2.0.1}$$

$$\begin{pmatrix} 3 & 5 & -6 \end{pmatrix}\mathbf{x} = 7 \tag{2.0.2}$$

- Plot of the plane :-

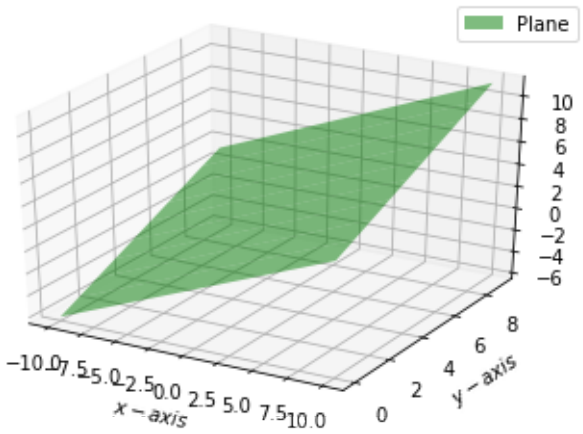

Fig. 2.1: Plot of the plane