Assignment 1

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Download all python codes from

https://github.com/yashwanthguguloth24/EE3025−
DSP−lab/tree/main/Assignment1/codes

and latex-tikz codes from

https://github.com/yashwanthguguloth24/EE3025−
DSP−lab/tree/main/Assignment1/chapters

1 PROBLEM

Given $x(n)$ and $y(n)$. Compute $X(k)$ using the formula

$$X(k) \triangleq \sum_{n=0}^{N-1} x(n)e^{-\jmath 2\pi kn/N}, \quad k = 0, 1, \ldots, N-1 \quad (1)$$

Then compute $Y(k)$ using

$$Y(k) = X(k)H(k) \quad (2)$$

2 SOLUTION

The following code plots Fig. //

https://github.com/yashwanthguguloth24/EE3025−
DSP−lab/tree/main/Assignment1/codes/6.2.py