

## ASSIGNMENT2 (Discrete Fourier Transform)

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1. For a given sequence  $x(n) = \{1 \ 2 \ 3 \ 4\}$ , find 4-point Discrete Fourier Transform and find Inverse Discrete Fourier Transform.
2. Find 8-point DFT of the sequence  $x(n) = \{1 \ 2 \ 3 \ 4\}$ .
3. For a 4-point DFT sequence

$$x(n) = \begin{cases} 1, & 0 \leq n \leq 3 \\ 0, & \text{otherwise} \end{cases}$$

Plot its magnitude and phase spectrum.