

Digital Signal Processing – Lab 3

Consider a sample input signal S , [3 2 5 7 9 8 17 2] and an impulse response H , [2 0 1 4]

1. Use the built-in MATLAB function **conv** to convolve S with H . Plot the output signal along with the original input signal and impulse response.
2. Write a custom function **InputSideConvolution** that implements convolution using the Input Side Algorithm.
3. Write another function **OutputSideConvolution** that uses the Output Side Algorithm.
4. Check that all 3 produce the exact same result.