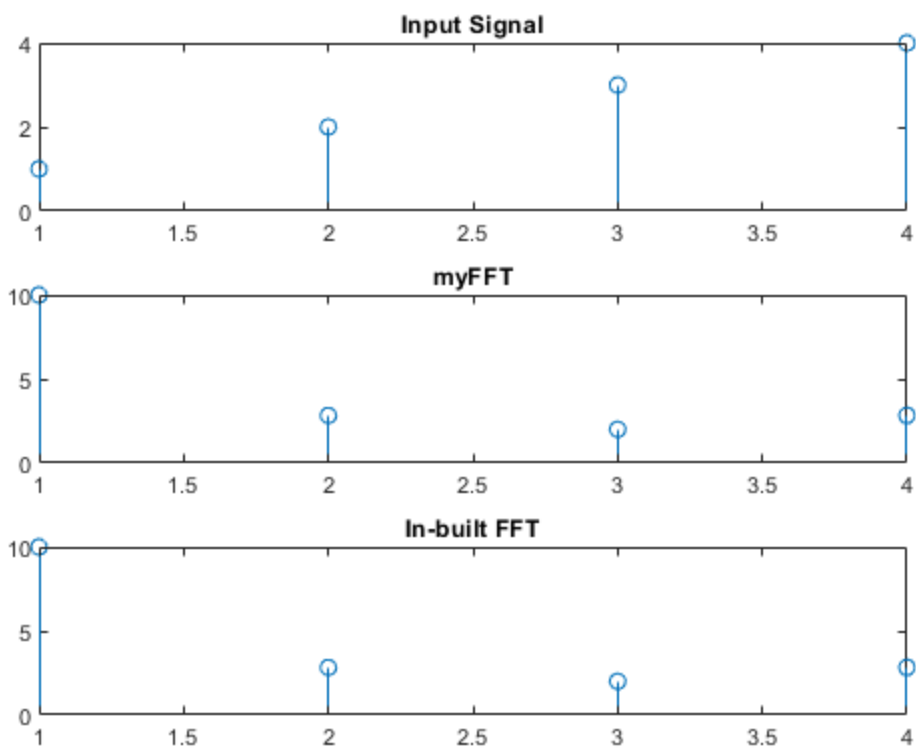


---

```
clc;
clear all;
close all;
x = [1, 2, 3, 4];
X=x;
N = length(x);
Half = 1;

V = ceil(log2(N));
butterfly_no = N/2;
x = [x, zeros(1, 2^V - N)];
x = bitrevorder(x);

for level = 1: V
    for index = 0: 2^level:N-1
        for n = 0 : (Half -1)
            position = n + index + 1;
            power = (2^(V-level))*n;
            w = exp(-2*1i* pi * power /N);
            a = x(position) + x(position + Half).*w;
            b = x(position) - x(position + Half).*w;
            x(position) = a;
            x(position + Half) = b;
        end
    end
    Half = Half * 2;
end
subplot(3, 1, 1)
stem(X);
title('Input Signal');
subplot(3,1, 2)
stem(abs(x));
title('myFFT');
subplot(3,1,3)
Y = fft(X);
stem(abs(Y));
title('In-built FFT');
```



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