

Experiment 10

Up Sampler

Insert $L - 1$ number of zeros in in the signal

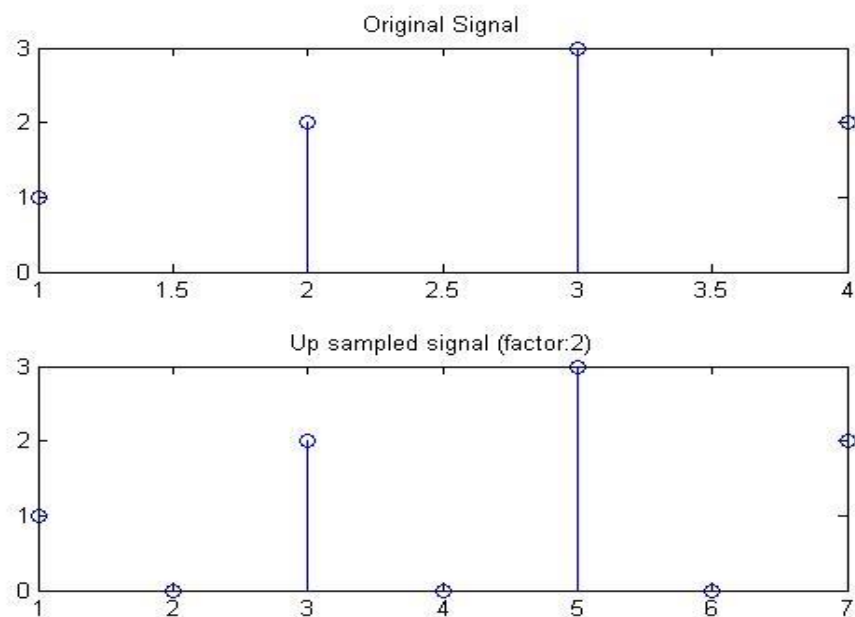
```
clear all;clc;
raw = [1 2 3 2];
L = 2;
len = length(raw);

new_len = ((len-1)*(L-1))+len;

data = zeros(1,new_len);

for i=0:new_len-1
    if ((mod(i,L)==0))
        data(i+1) = raw((i/L)+1);
    end
end

subplot(211),stem(raw),title('Original signal');
subplot(212),stem(data),title('Up sampled signal (factor:2)');
```



Conclusion

Input signal successfully up-sampled by a factor of 2.