

Experiment 11

Down Sampler

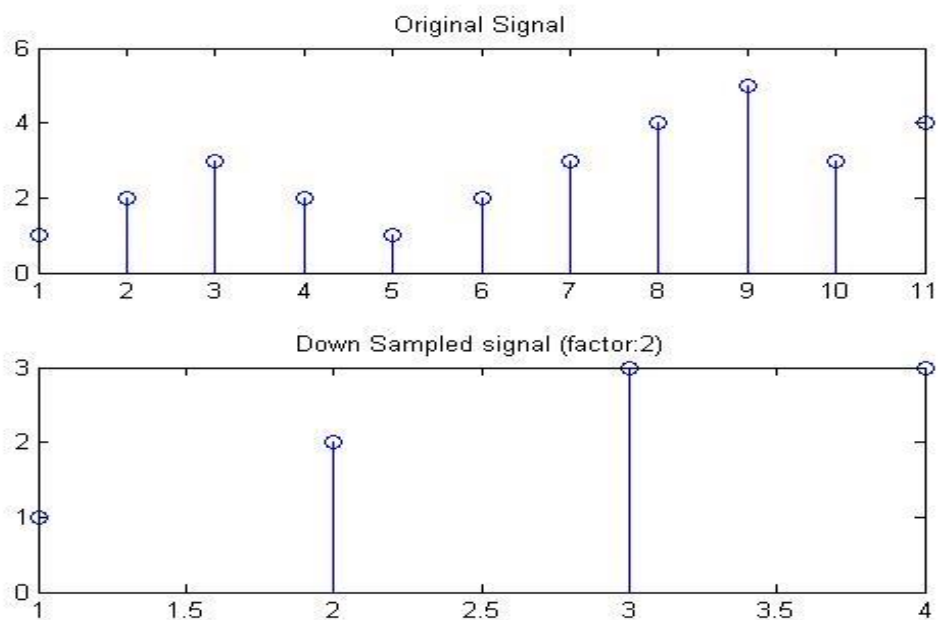
Remove L samples from the sequence periodically.

```
clear all;clc;

signal = [1 2 3 2 1 2 3 4 5 3 4];
L = length(signal);

factor = 2;

i = 1;
count = 1;
while (i<=L)
    if (mod((i-1),3)==0)
        new(count) = signal(i);
        count = count+1;
    end
    i = i+1;
end
subplot(211),stem(signal),title('Original Signal');
subplot(212),stem(new),title('Down Sampled signal (factor:2)');
```



Conclusion

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