

**College Name: -** Walchand College of Engineering, Sangli

**Year: -** Third Year

**Name: -** Om Ajit Patil

**PRN: -** 2020BTEEN00058

**Subject: -** Digital Signal System Lab

**Batch: -** EN3

## Code

```
clear all;
N = 10; % Length of sequence
n = 0:1:N-1;

% Input sequence
x = sin(2*pi*n/10) + sin(2*pi*n/5);
% Upsampling factor
L = 3
x1 = [zeros(1,L*N)];
n1=1:1:L*N;
j=1:L:L*N;
x1(j)=x;
subplot(2,1,1),stem(n,x)
xlabel('n');ylabel('x');
title('Input Sequence');
subplot(2,1,2),stem(n1,x1)
xlabel('n');
ylabel('x1');
title('Upsamples Sequence');
```

## Output

