

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

**Year: -** Third Year

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**Subject: -** Digital Signal System Lab

**Batch: -** EN3

## Code

```
clc;
clear all;
close all;

N = input('Median Filter Length = ');
R = 50;
a = rand(1,R) - 0.4;
b = round(a); % Generate impuse Noise
m=0:R-1;
s=2*m.*(0.9.^m); % Generate Signal

x=s+b; % impulse noise corrupted signal
y = medfilt1(x,N); % Median filtering

subplot(2,1,1);
stem(m,x);
axis([0 50 -1 8]);
xlabel('n');
ylabel('Impulse Noise Corrupted Signal');
subplot(2,1,2)
stem(m,y)
xlabel('n');
ylabel('Amplitude');
title('Output of Median Filter');
```

## Output

