College Name: - Walchand College of Engineering, Sangli
Year: -   Third Year
Name: -   Om Ajit Patil
PRN: -   2020BTEEN00058
Subject: - Digital Signal System Lab
Batch: -   EN3

Code

```
close all;
clc;

wc = 0.5*pi; % cutoff frequency
N = 25;

% Tuning parameter = 0.5
b = fir1(N,wc/pi,kaiser(N+1,0.5));
w = 0:0.01:pi;
h = freqz(b,1,w);
plot(w/pi,20*log10(abs(h)),'g-');
hold on;

% Tuning parameter = 3.5
b = fir1(N,wc/pi,kaiser(N+1,3.5));
w = 0:0.01:pi;
h = freqz(b,1,w);
plot(w/pi,20*log10(abs(h)),'r-');
hold on;

% Tuning parameter = 8.5
b = fir1(N,wc/pi,kaiser(N+1,8.5));
w = 0:0.01:pi;
h = freqz(b,1,w);
plot(w/pi,20*log10(abs(h)),'b-');

xlabel('Normalized frequency \omega/\pi');
ylabel('Magnitude in dB');
legend('Tuning parameter 0.5','Tuning Parameter 3.5','Tuning
Parameter 8.5');
hold off;
```