

```
1 %% preparing data for the transfer function
2 R=1000; C=100e-9;
3 f=logspace(-2,6); % frequency from 10^-2 to 10^6
4 % Transfer function of a RC Low pass filter
5 G = 1./(1+1i*R*C*2*pi*f);
6
7 %% the plot itself consist of two subplots
8 % we are plotting Bode plot with amplitude change in dB subplot(2,1,1);
9 % upper panel
10 semilogx(f, 20*log10(abs(G)));
11 ylabel('Gain (dB)');
12
13 xlabel('Frequency (Hz)');
14 title('Bode plot')
15
16 subplot(2,1,2); % Lower panel
17 semilogx(f, angle(G));
18 ylabel('Phase (radians)');
19 xlabel('Frequency (Hz)');
20
```