```
function my Ans =
 voltage_signal_analysis(time_vector,voltage_vector,current_vector,current_frequen
%frequencies_vector = [3,10,20,51,100,201,348,1010];
%resistances_vector =
 [169001,122323,73802,34398,17902,9316,5407,2727];
size(voltage_vector);
size(current_vector);
resistor_w_value;
bio_impedance_vector = voltage_vector./current_vector - 2 *
 resistor w value;
coefficients_vector = [10^3, current_frequency, 0];
y =
 @(\texttt{coefficients\_vector}, \texttt{x}) \texttt{coefficients\_vector}(1) * \texttt{cos}(\texttt{coefficients\_vector}(2) * \texttt{x}
 + coefficients_vector(3));
size(time vector);
size(bio_impedance_vector);
size(y(time_vector,coefficients_vector));
[myFit,resnorm,residual] =
 lsqcurvefit(y,coefficients_vector,time_vector,bio_impedance_vector,
[0,current_frequency - 0.00001,-pi],[10^9,current_frequency +
 0.00001,pi],optimset('TolFun',1e-10));
disp(resnorm)
figure
plot(time_vector,myFit(1) * cos(myFit(2) * time_vector +
 myFit(3)),'g-',time_vector,bio_impedance_vector,'b-')
R = myFit(1) / sqrt(1 + (tan(myFit(3)) ^ 2));
Xc = R * tan(myFit(3));
my\_Ans = [R,Xc];
end
Not enough input arguments.
Error in voltage_signal_analysis (line 4)
size(voltage_vector);
```

Published with MATLAB® R2018a