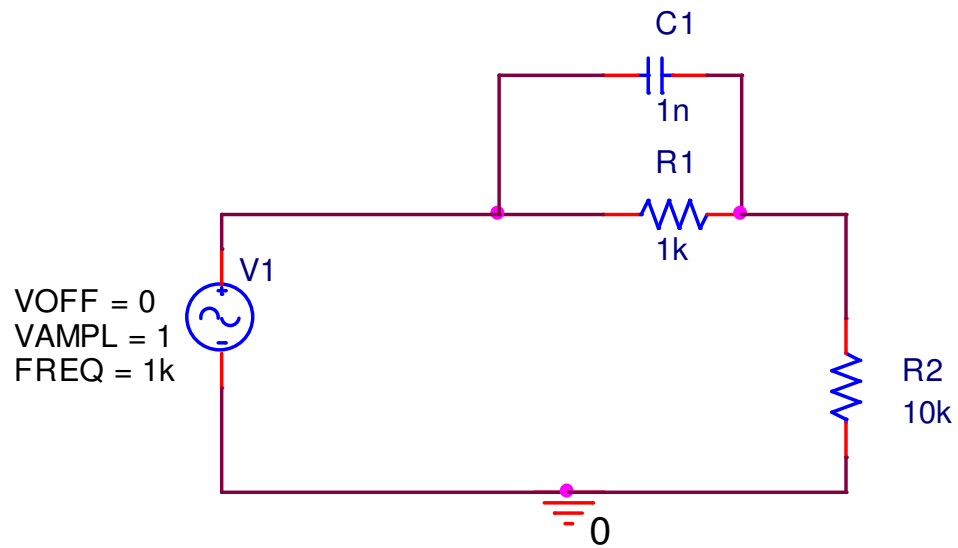


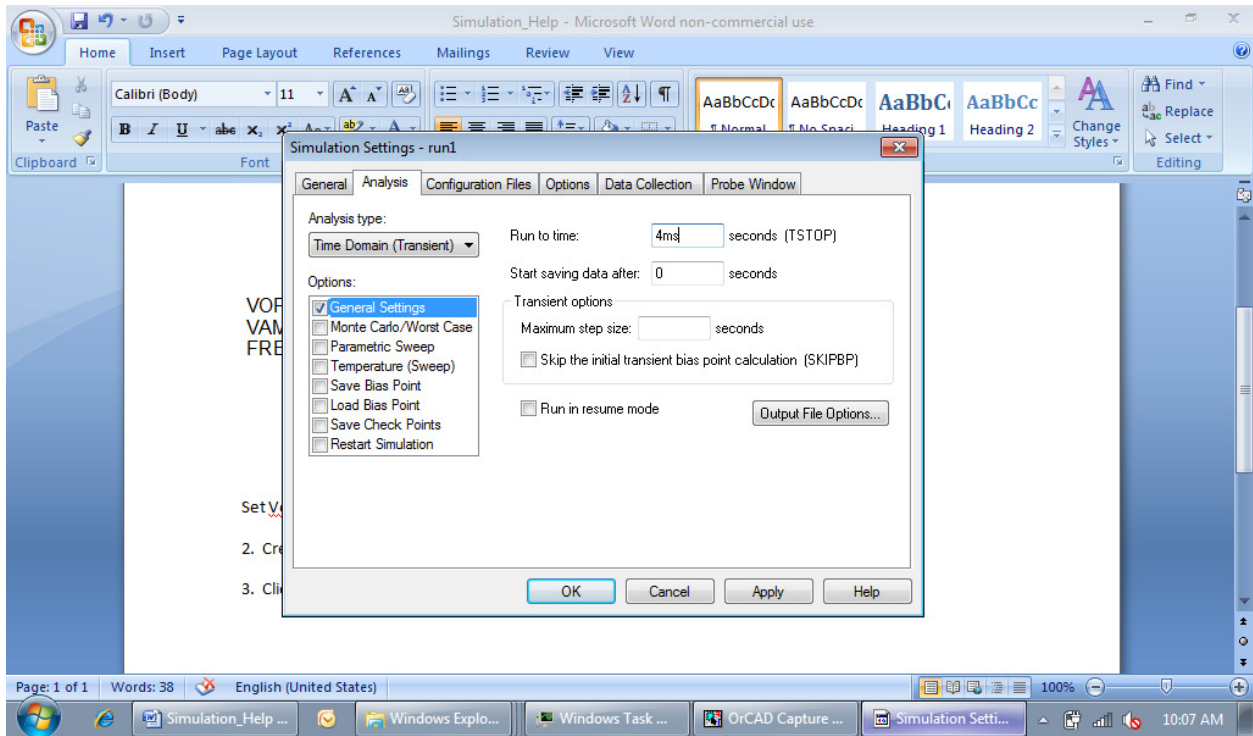
Simulating with a sinusoidal source:

1. Draw the schematic. Use a Vsin as the source.



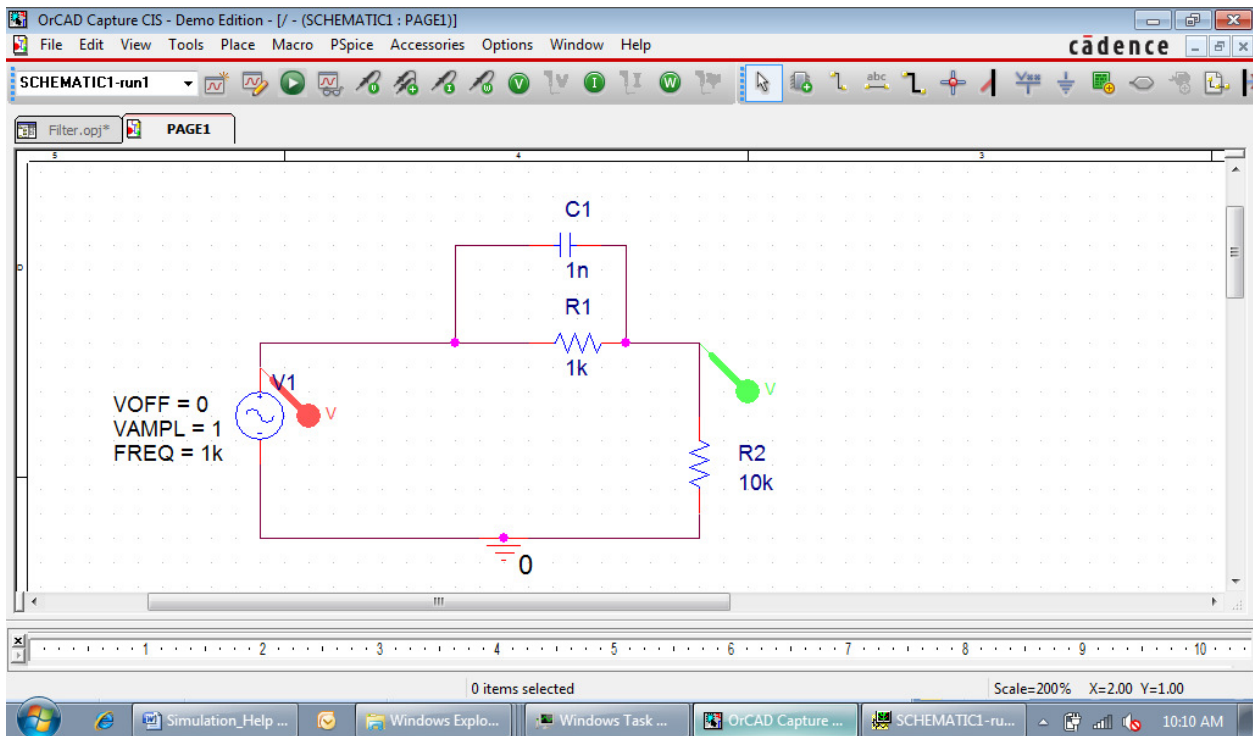
Set Voff=0, Vamp=1 and freq =1k (this is a default of HZ)

2. Create New Simulation Profile
3. Click on Edit Simulation Profile.

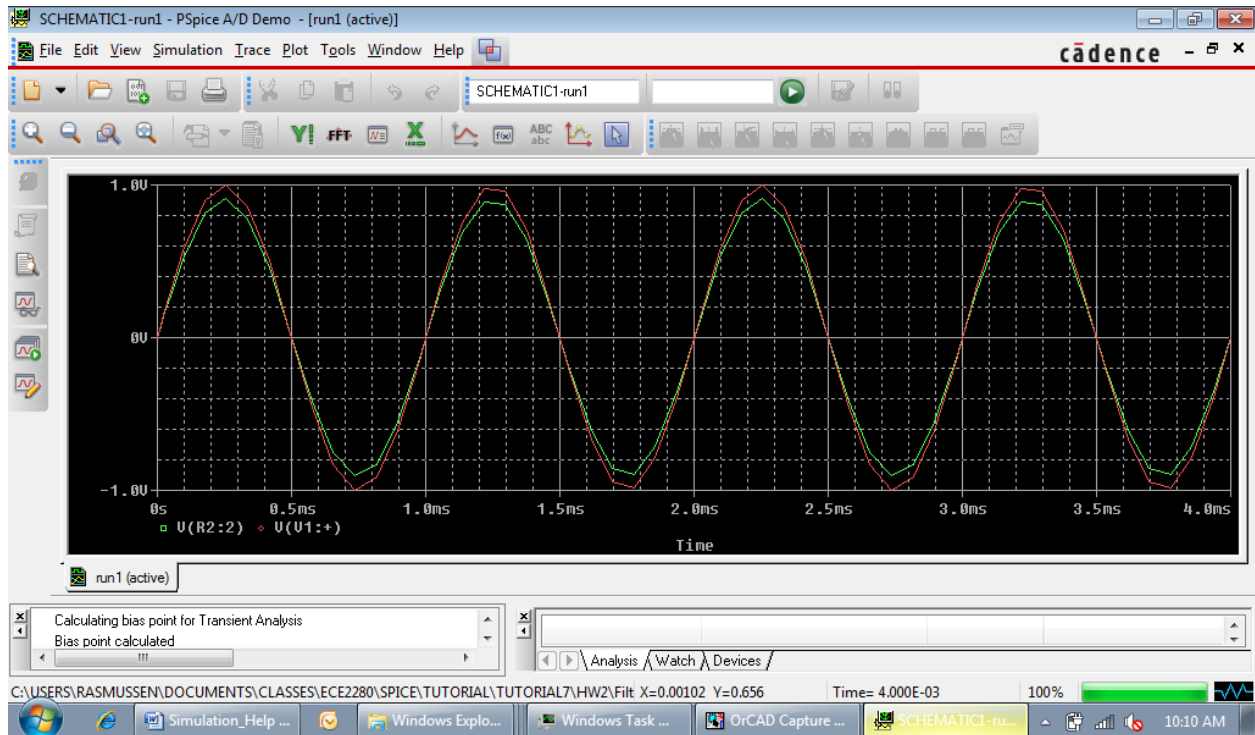


Select Time Domain (transient) for the analysis type. The run time depends on your signal frequency. For a 1kHz signal,  $1/1k=1\text{msec}$  for 1 cycle. I put in 4ms for 4 cycles to show.

4. Place V probe at output node and at input signal and run simulation.

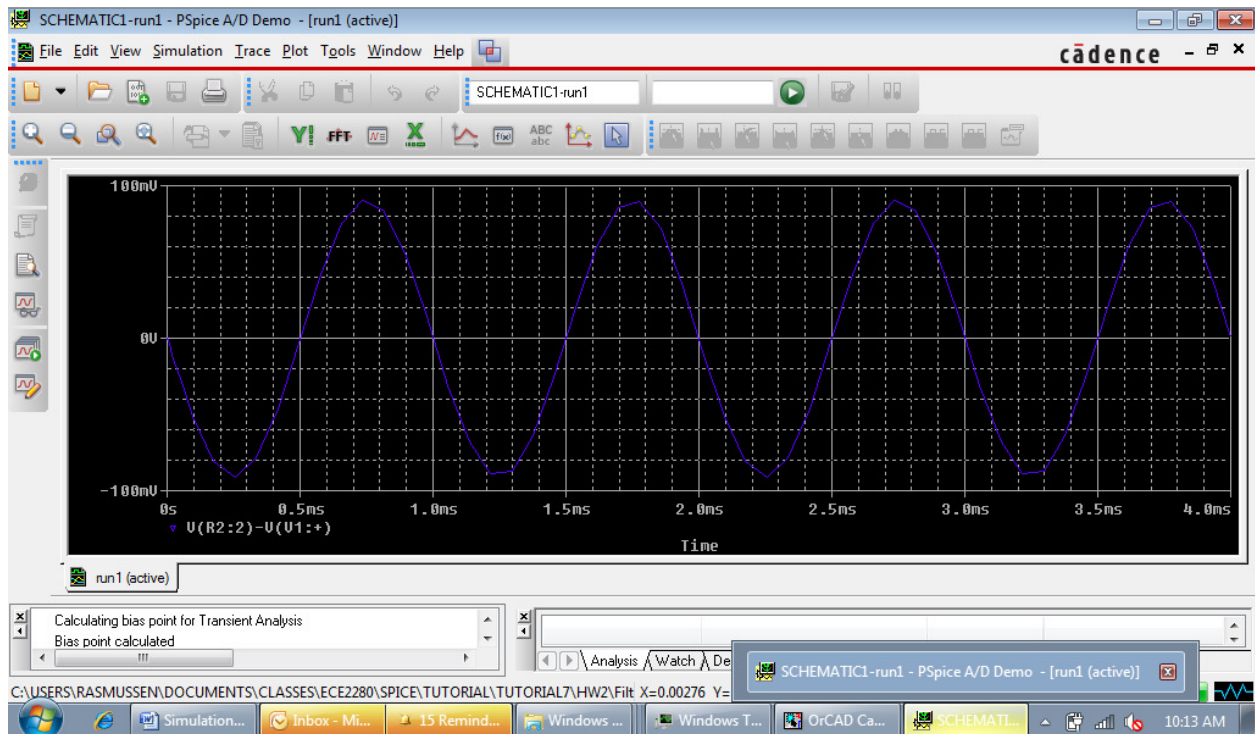
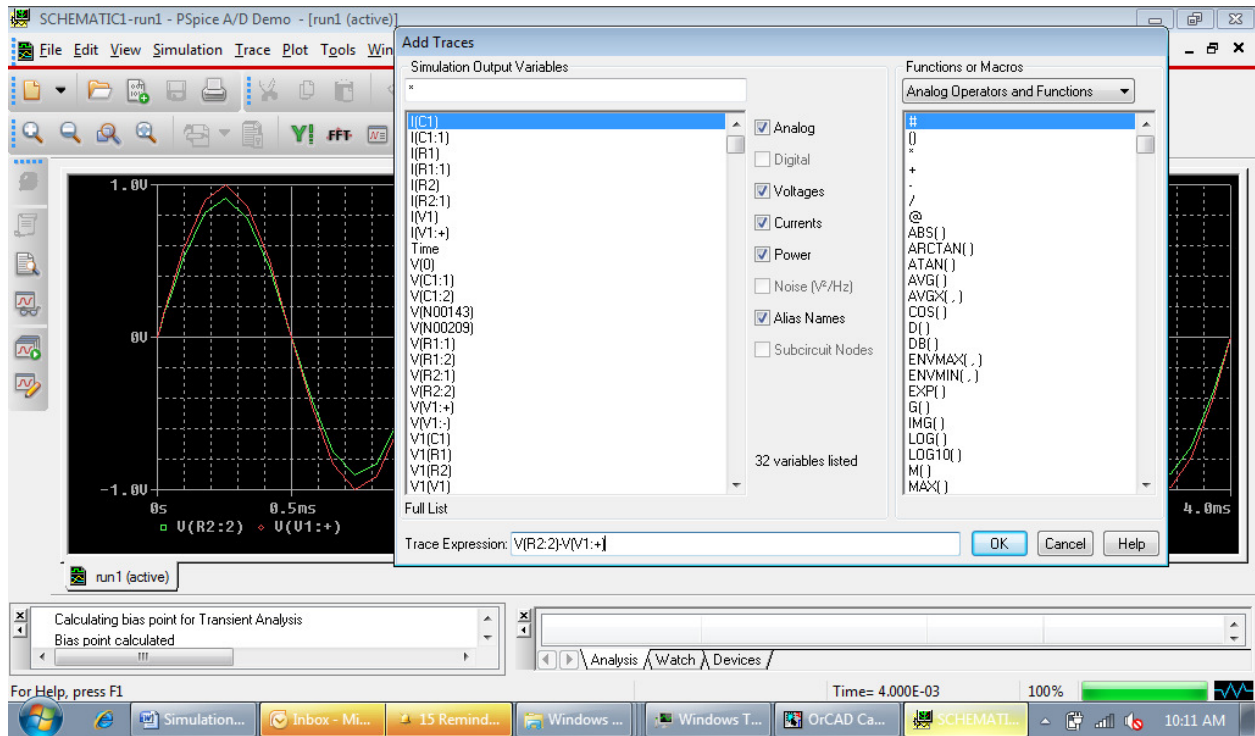


5. This should be observed in the simulation window.



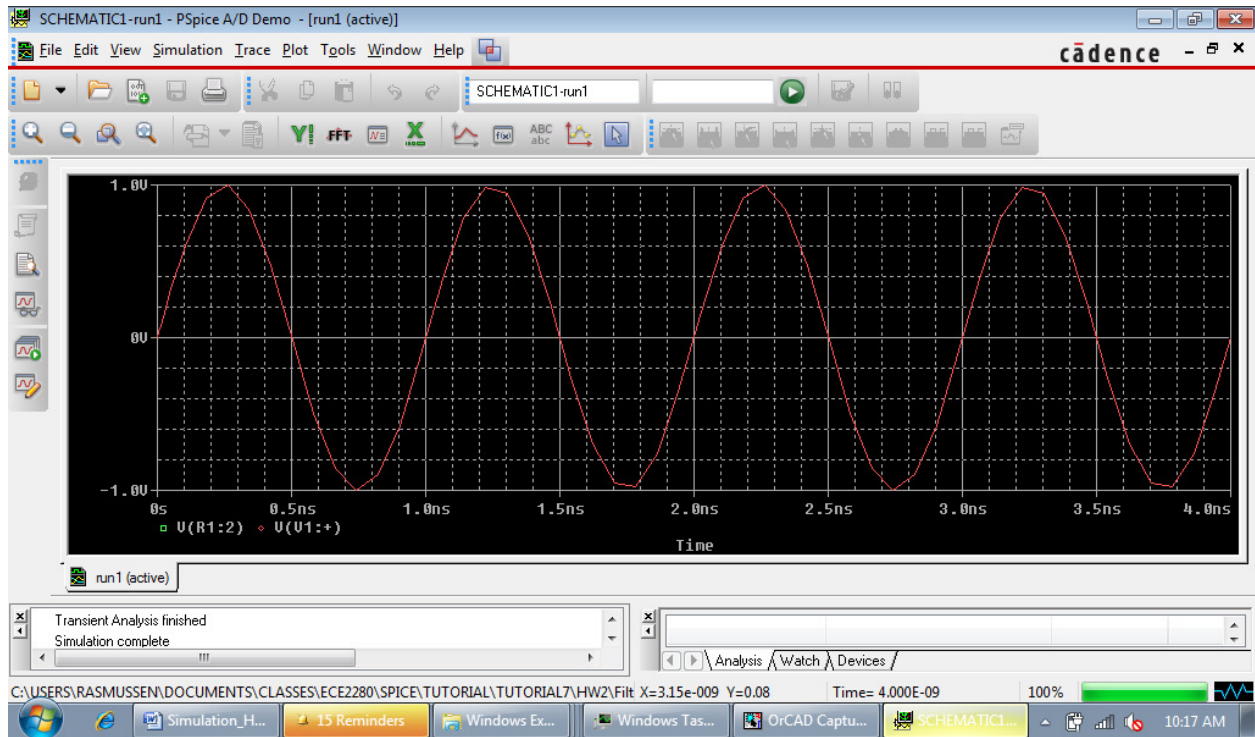
Since these signals are pretty similar, a difference of the signals would be useful.

To do that, go to Trace -> Add Trace. A window pops up. In the window, you can type an expression in the Trace Expression box. Subtract the two names as seen in the simulation window. You can delete the other two signals to observe just the difference signal. This result is showing the attenuation of the signal.



6. Redo the simulation for the 1GHz frequency. Make sure to change the frequency of the Vsin to 1G and change the simulation time to nsec instead of msec.

7. Results should be identical:



This shows that the signal is passed at the high frequency unlike the lower frequency which is attenuating the signal.