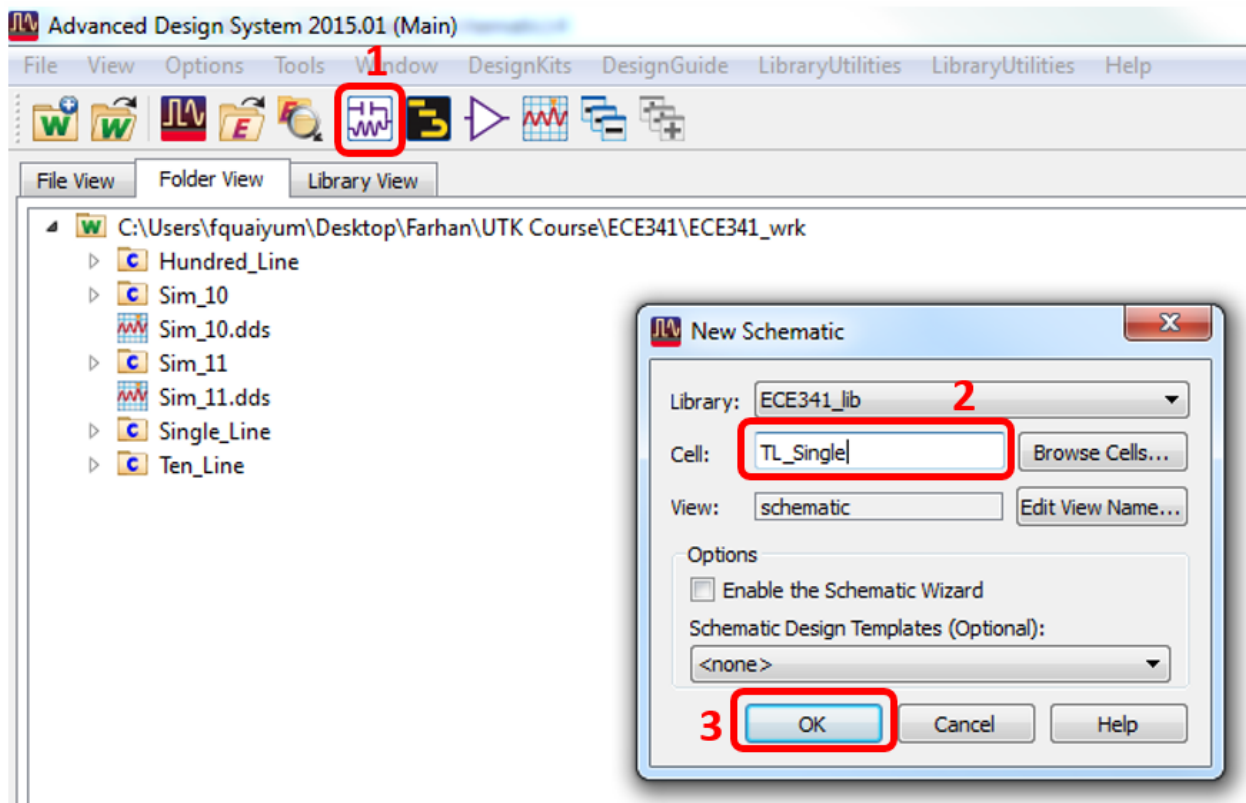
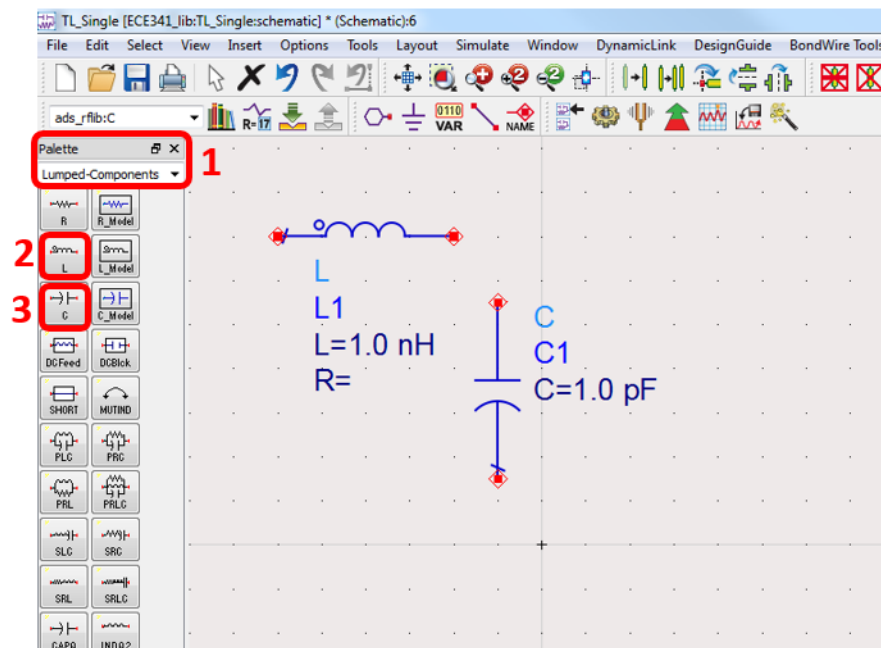


Creating an LC network

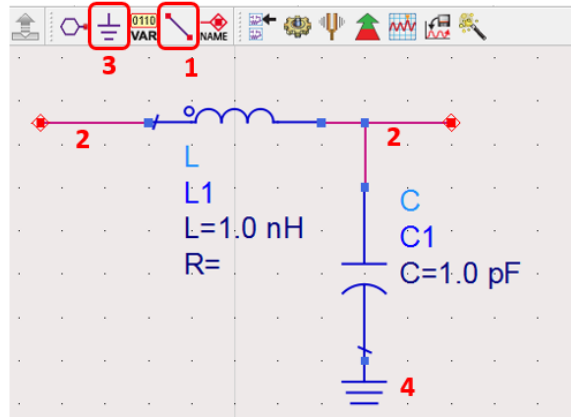
1. Open a new schematic from ADS main window and give a cell name.



2. Make sure you are in under the **Lumped-Components** palette. Then put an inductor and capacitor on the schematic as shown below. You can use ctrl+R to rotate the components.



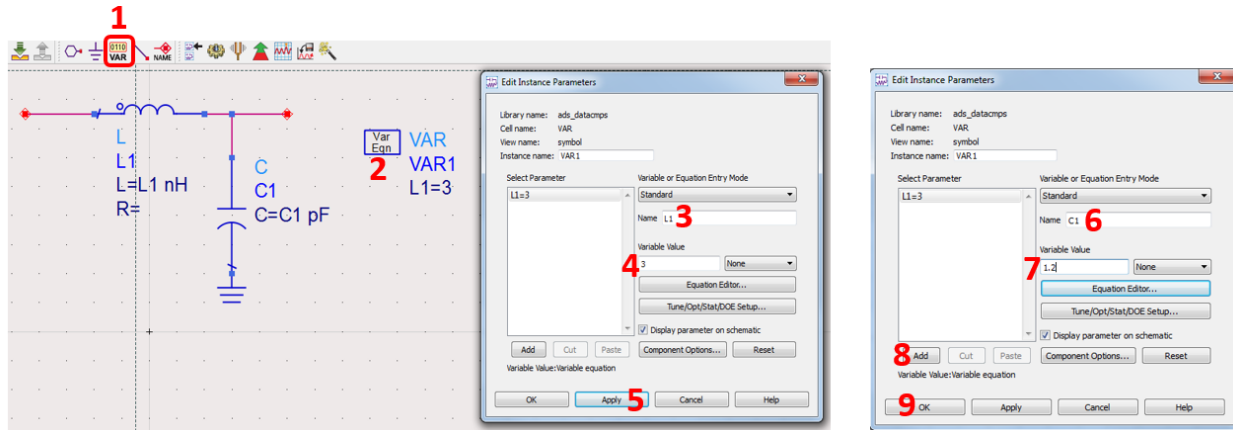
3. Use wires to connect the components as shown and put a ground with the capacitor



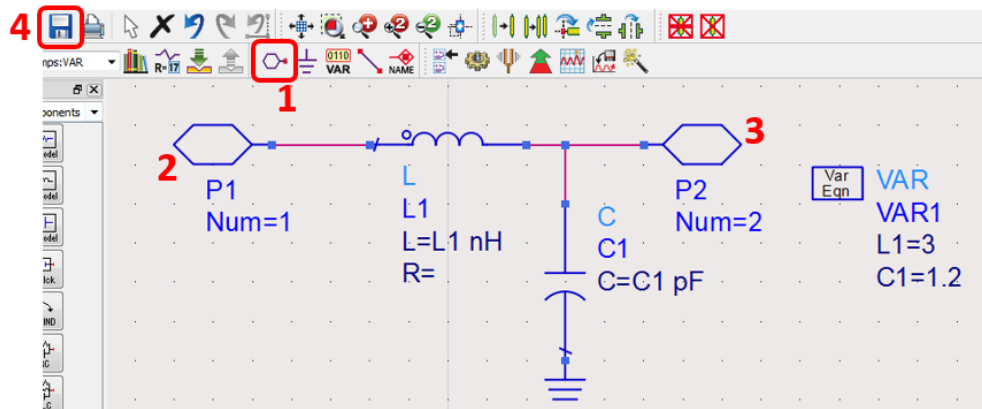
4. Double click on the inductor, change its value from 1 nH to a variable L1 nH as shown below. Similarly change the capacitor value from 1.0 pF to C1 pF.

5. We have created an LC network with two parameters L1 (inductance of the inductor in the unit of nH) and C1 (capacitance in the unit of pF). Please pay attention to the units.

6. Place a variable on your schematic, double click on it and enter the values of L1 (in nH) and C1 (in pF).



7. Add two ports at the two ends to complete the cell. Then save the schematic and close it.



8. In order to create a symbol for the cell, open a new schematic, give it any name (e.g. TL_Ten). While keeping the schematic open, go to the ADS main window, right click on the previous cell and click on Place Component. Click Yes saying that you want to create a symbol for the cell and then click Ok on the Symbol Generator Tab. You can then place a symbol of the cell on the new schematic.

