

# ECET 102/CPET 101

## Lab 6

### MULTISIM Exercises Lab

<http://www.etcs.ipfw.edu/~lin>

## Lab Activities

1. Multisim Exercise 1, a simple DC circuit with  $E = V1 = 12$  volts,  $R1 = 4$  k Ohms, from page 128-130
2. Multisim Exercise 2, a DC circuit with three resistors in series, volt meters and amp meters, pages 174-175
3. Multisim circuit examples using Fig 5.96 on page 179

## Lab Activities

- Start NI Multisim 11 Circuit Simulation and Design Program by
  - Start => National Instruments => Circuit Design Suite 11 => Multisim 11
- Follow the first Multisim example explained in Chapter 4, pages 128-130, to create your first Multisim simulation circuit
- Save your simulation as p128.

Feb. 20, 2012

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## Lab Activities

- Start NI Multisim 11 Circuit Simulation and Design Program by
  - Start => National Instruments => Circuit Design Suite 11 => Multisim 11
- Follow the first Multisim example explained in Chapter 4, pages 128-130, to create your first Multisim simulation circuit

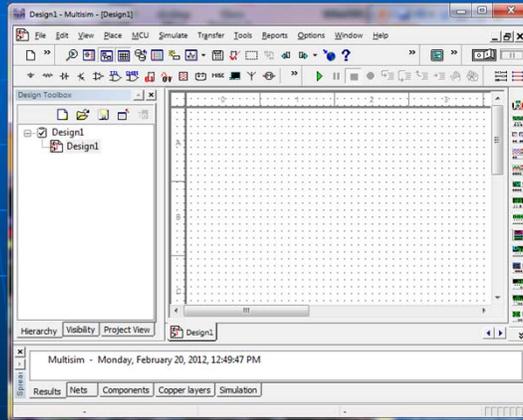
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# Lab Activities 6-1

- 1. Start your Multisim 11 as shown below



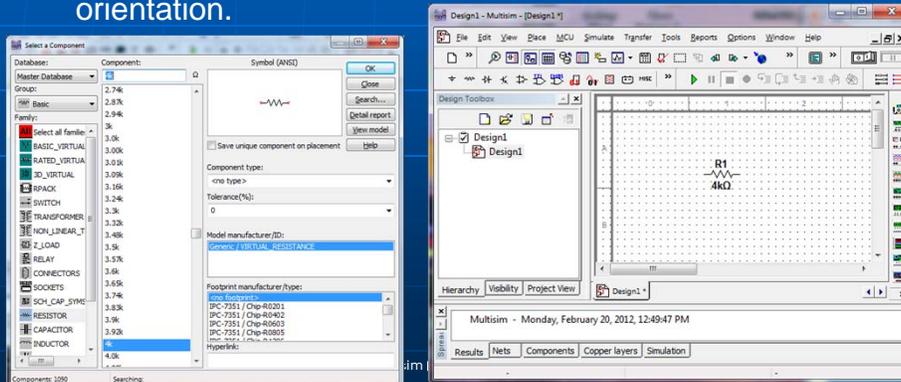
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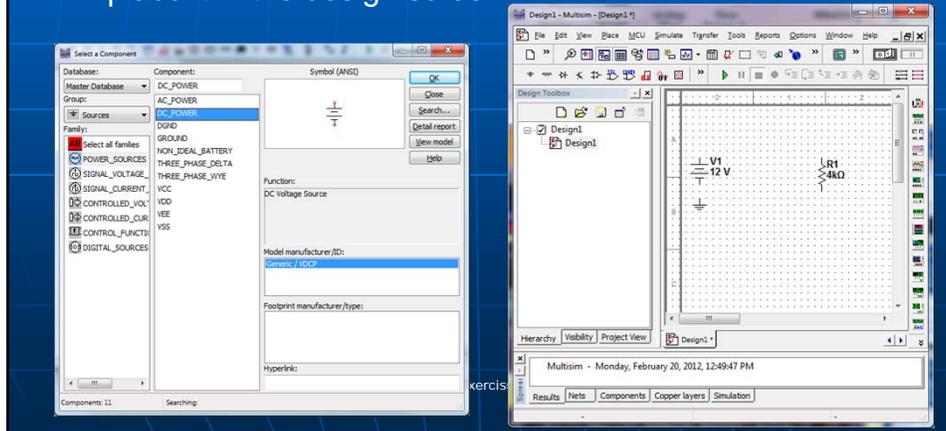
# Lab Activities 6-1

- 2. Locate the 4 k ohm resistor, by clicking the resistor symbol located on the third row of the menu bar
- 3. Place it on the Multisim Design screen; right click the 4 k resistor, chose rotate 90 degree to change its orientation.



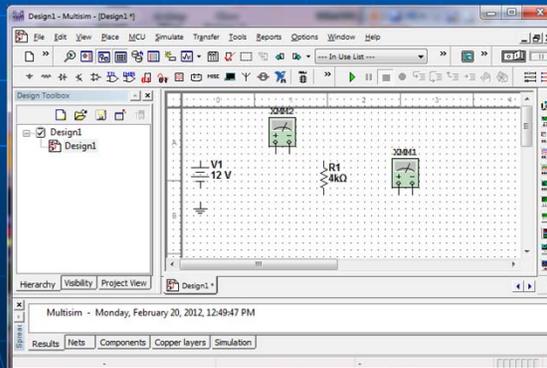
## Lab Activities 6-1

- 4. Click on the ground symbol, chose the symbol and place it onto Design screen.
- 5. Continue to click on DC\_POWER component, and place it in the design screen



## Lab Activities 6-1

- 6. Click on the ground symbol, chose the symbol and place it onto Design screen.
- 7. Continue to click on DC\_POWER component, and place it in the design screen
- 8. Locate DMM and place them on the screen as shown below

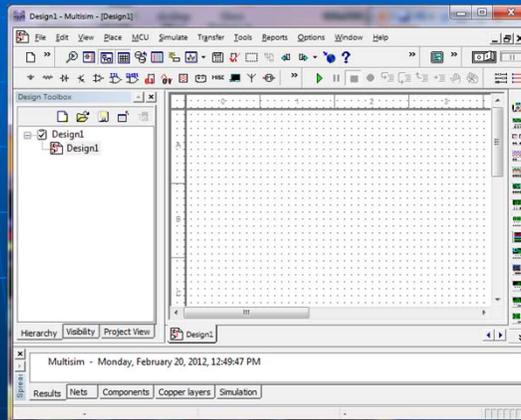


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## Lab Activities 6-1

- 1. Start your Multisim 11 as shown below



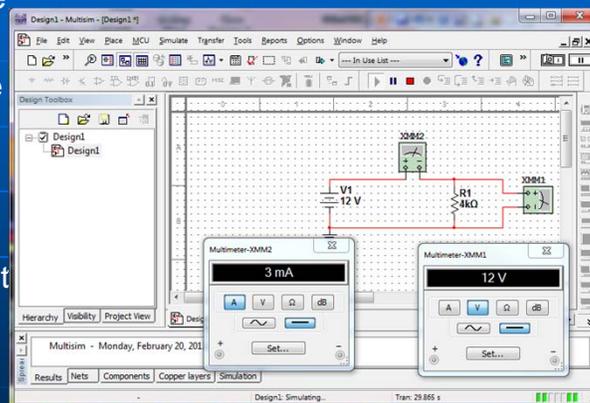
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## Lab Activities 6-1

- 10. Start your circuit simulation, by clicking on Simulate => Run
- 11. Double click the first DMM and change it to A meter; double click the second DMM and change it to volt meter.
- 12. Click Simulate => Stop to stop simulation



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## Lab Activities 6-2 and 6-3

Repeat the same procedure for

- Lab Activity 6-2: Multisim Exercise 2, a DC circuit with three resistors in series, volt meters and amp meters, pages 174-175
- Lab Activity 6-3: Multisim circuit examples using Fig 5.96 on page 179
- Prepare a lab report for the Lab activities 6-1, 6-2, and 6-3