EC210 – Solid State Electronics
Lab 4
Photo-Electric Effect Experiment
&
Photo-resistor Project

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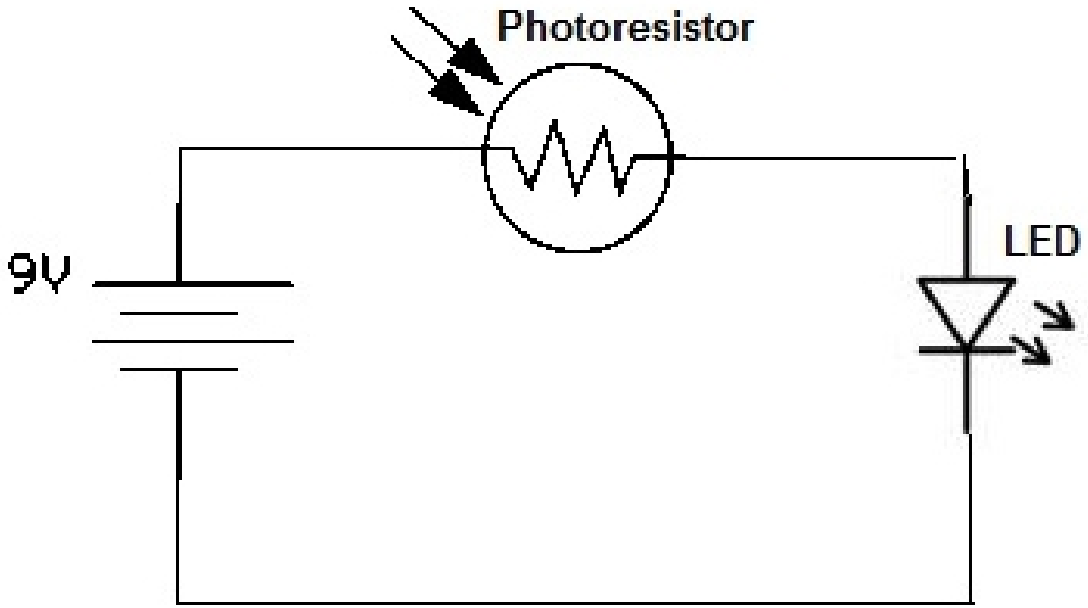
Class : Solid State Electronics - EC210, Spring 2015
Lecturer: Dr. Amr Bayoumi

Outline

- Photo-Electric Effect experiment
- Photo-resistors project description
- Report on Photo-Electric Effect !
- Project on Photo-resistors !

Photo-resistor Project

- **Circuit Diagram:**



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http://www.learningaboutelectronics.com/Articles/How-to-build-a-simple-photoresistor-circuit

Photo-resistors Project (cont.)

- **Parts:.**
  1. **9v Battery**
  2. **Photoresistor**
  3. **LED**
  4. **Bread Board**

Photo-resistors Project (cont.)

- **Process:.**
  - **Step (1):** Turning on the light this leads to lilting the LED

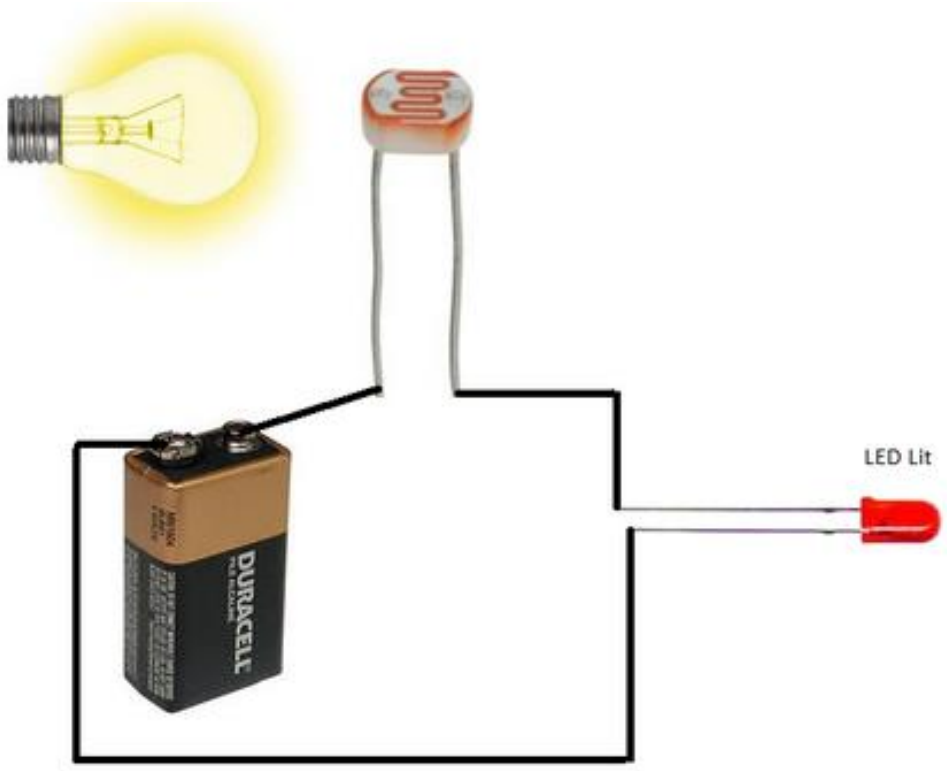

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Photo-resistors Project (cont.)

- **Step (2):** Putting a thick cloth or pen lid or any object that doesn't absorb light over the photoresistor which leads to turning off the LED.

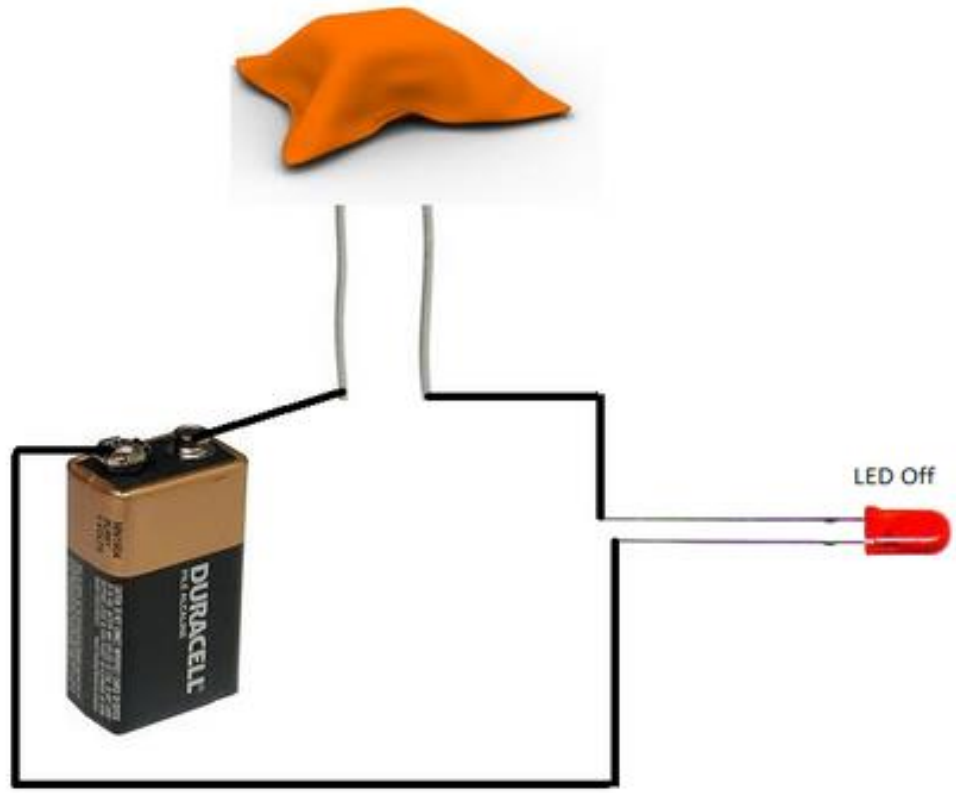

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Photo-resistors Project (cont.)

- **Step (3):** Turning off the room light which leads to turning off the LED.

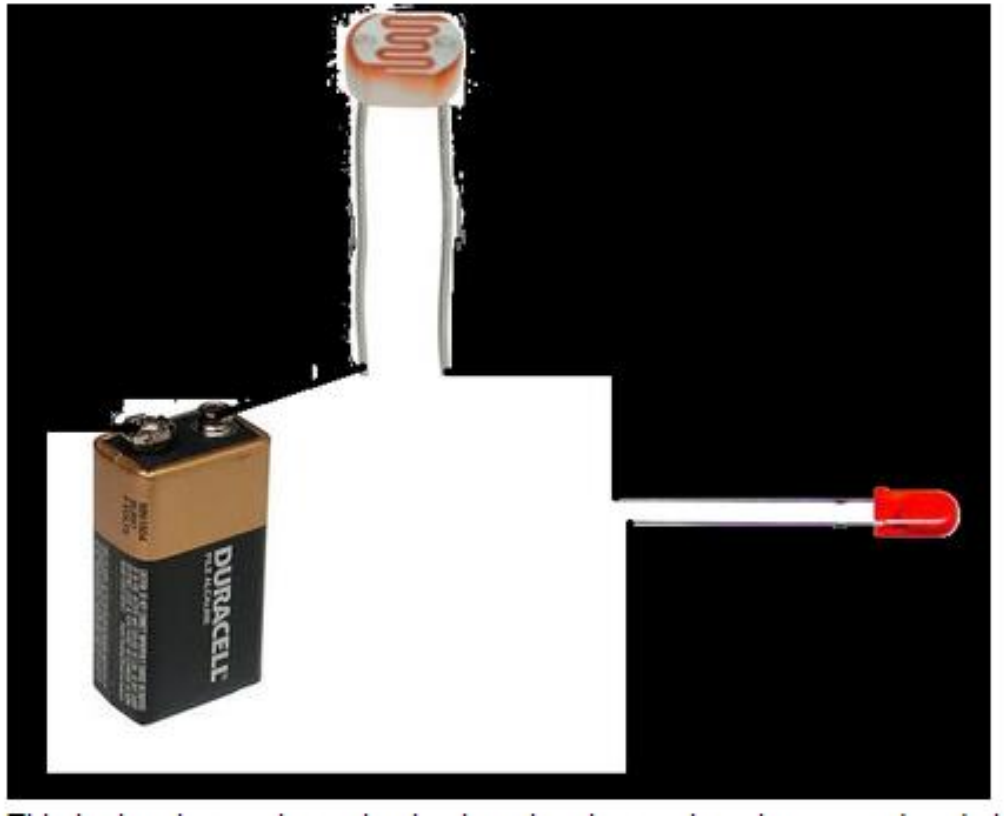

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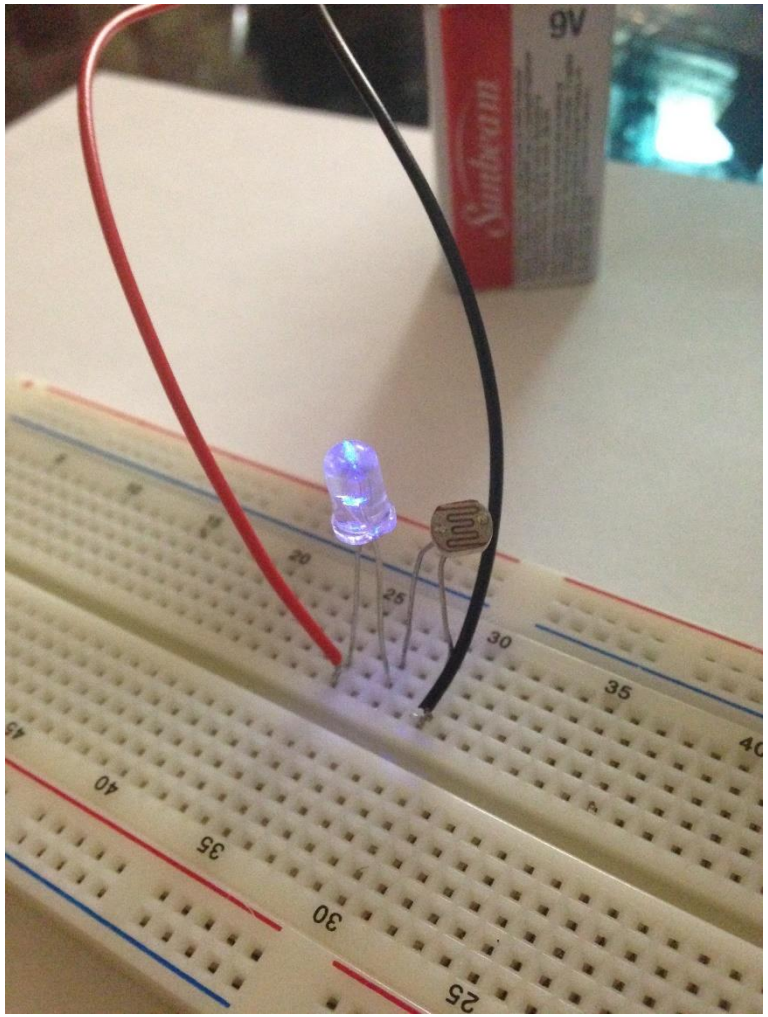
Photo-resistors Project (cont.)

- **Real Life Schematic:.**



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Assignment !

- A very brief report on the Photo-Electric Effect which indicates the Blanks man's Constant for different materials and experiment objective (Hard Copy)
- **Due Date:17-Mar-15**

Thank you for your attention