While Statement Conditional

Description

      This example uses a photo resistor to set the min and max values of the brightness of the LED, and a push button to calibrate the min and max. We will be using the code provided under the examples on the Arduino* IDE 1.5.3.

Hardware

- Intel® Galileo
- Breadboard
- Photo resistor
- Momentary push button
- 1 LED
- Wires
- 2-10K resistor
- 1-220 ohms resistor

Instructions *(see circuit below)*

1. Place the photo resistor on the breadboard.
2. Connect one side of the photo resistor to 5V.
3. Connect the other side of the photo resistor to A0 on the Galileo.
4. Connect 10K resistor to the photo resistor and A0 to GND.
5. Connect the negative side of the LED to GND.
6. Connect the positive side of the LED to Pin 9 on the Galileo, but place a 220 ohm resistor in-between.
7. Place a momentary push button with the middle breadboard division underneath.
8. Connect the bottom left pin of the button to GND with a 10K resistor.
9. Connect the bottom right pin of the button to 5V.
10. Connect the top left pin of the button to pin-out 2 on the Galileo.
11. Connect power supply to the Galileo and USB to USB Client Port on the Galileo.
12. Open Arduino IDE under Tools → Board select Intel® Galileo
13. Under Tools → Serial Port select the Com # where the Galileo is connected to.
14. Under File → Examples → 05.Control and select the "WhileStatementConditional" example.
15. Upload to the Galileo by clicking the upload button.

Circuit