

MATERIALS AND EQUIPMENT

The following materials and equipments were used to complete the experiment:

1. Arduino Uno Board
2. LED
3. Resistor
4. Light Dependent Resistor
5. Connecting Wires
6. Breadboard
7. Arduino IDE (Software)

PROCEDURE

The following steps were followed to complete the experiment and toggle the LED using the Arduino board and the button:

1. Connect the Arduino Uno board to the computer using a USB cable
2. Insert the LED and a resistor serially into the breadboard and connect one leg from the resistor to pin 9 on the Arduino. Connect the other leg of the LED to the ground (GND).
3. Insert the LDR on the breadboard and connect one point to ground (GND) and connect the other end to the A0 pin of the Arduino.
4. Connect another resistor to the 5V of the Arduino and another end to the common connecting ground of A0 of the Arduino.
5. Write the code for inspecting the LED using the LDR, upload the code to the Arduino board using the "Upload" button in the IDE and observe the LED by using a flashlight on the LDR.