

Step 1: Open Arduino IDE.

Step 2: Create a New Sketch

Step 3: Define Pin Constants

Define constants for the pins connected to the IR sensor output and the LED:

Step 4: Setup Function

In the setup function, configure the pins

Step 5: In the loop() function,

continuously read the state of the sensor and control

Step 6: Verify your code for any syntax errors by clicking on the verify button (checkmark icon) in the Arduino IDE.

Step 7: Power up your Arduino Uno board and test the sensor with objects to observe the LED behavior.

Step 8: Stop the Program and Disconnect the