

PROJECT IDEA

Control the electrical circuit using the motion sensor.



Done by:

Afifa Khaled

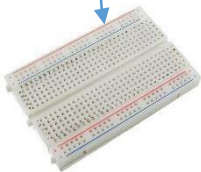
Problem Statement


Is not it nice to have a device that lights your room to turn on and turn off the lights in your room when you go out or enter the room?

For my final project, I will use the PIR Sensor to detect any movement occurring in a 20-foot orbit, which can monitor movement from 20 feet. I will also use the Relay to connect room lamps, for example, in order for Relay to control the power of the lights. And of course the Arduino, which is the heart of the project. I will program it to accomplish its mission successfully.

Materials

 Breadboard



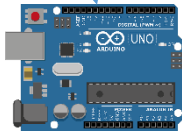
 Pir sensor



 Relay



Arduino



Jumper Wires



LED



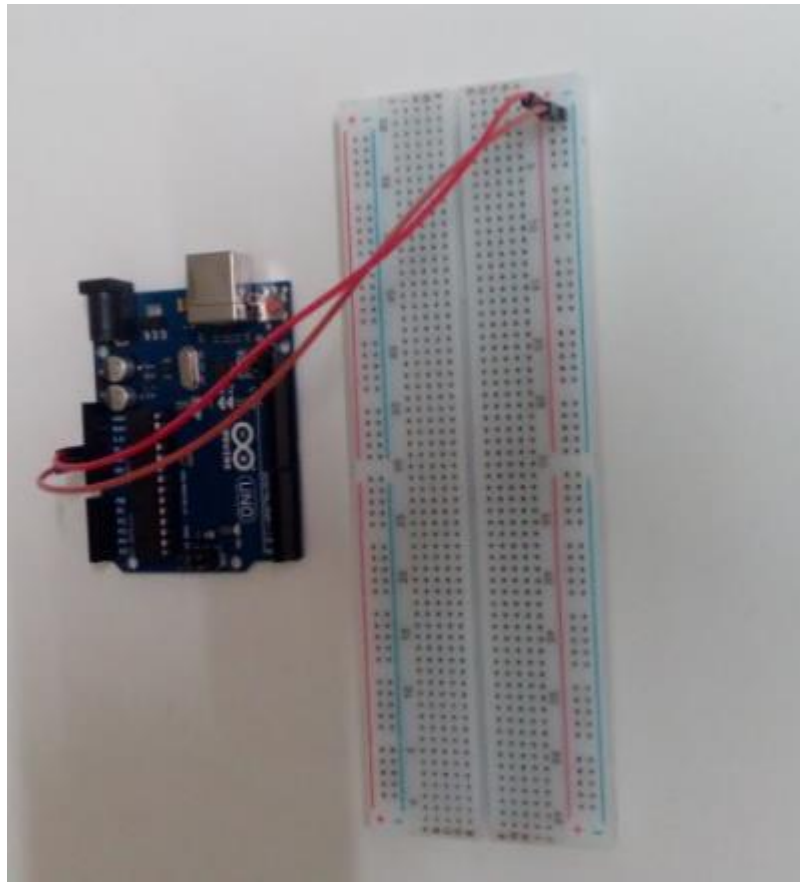
Computer



The first step :

Connect the 5volt port on the Arduino to the power outlets on the side of the breadboard and the Gnd port on the Arduino on the negative power outlets on the breadboard as

Shown in the image.

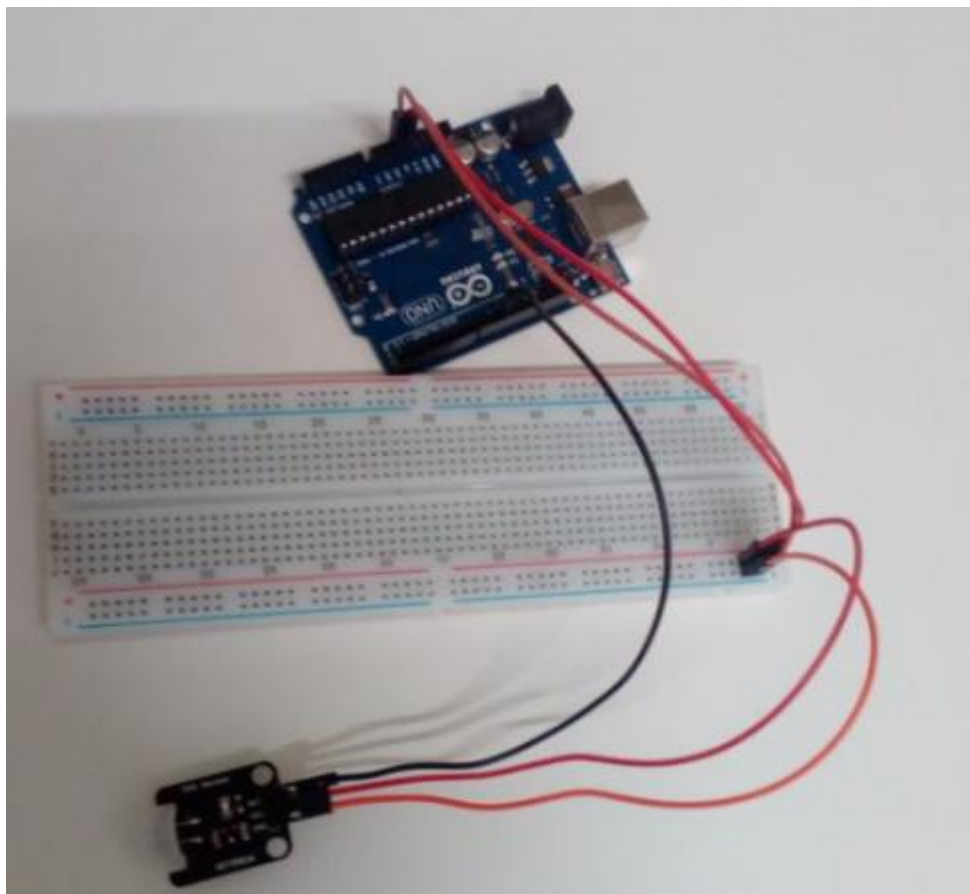




The second step:

Connect the positive power cord of the sensor to the 5 v port on the breadboard, and the negative power cord to Gnd port on the breadboard.
Plug the Signal cable into port 9 on the card.

Shown in the image.



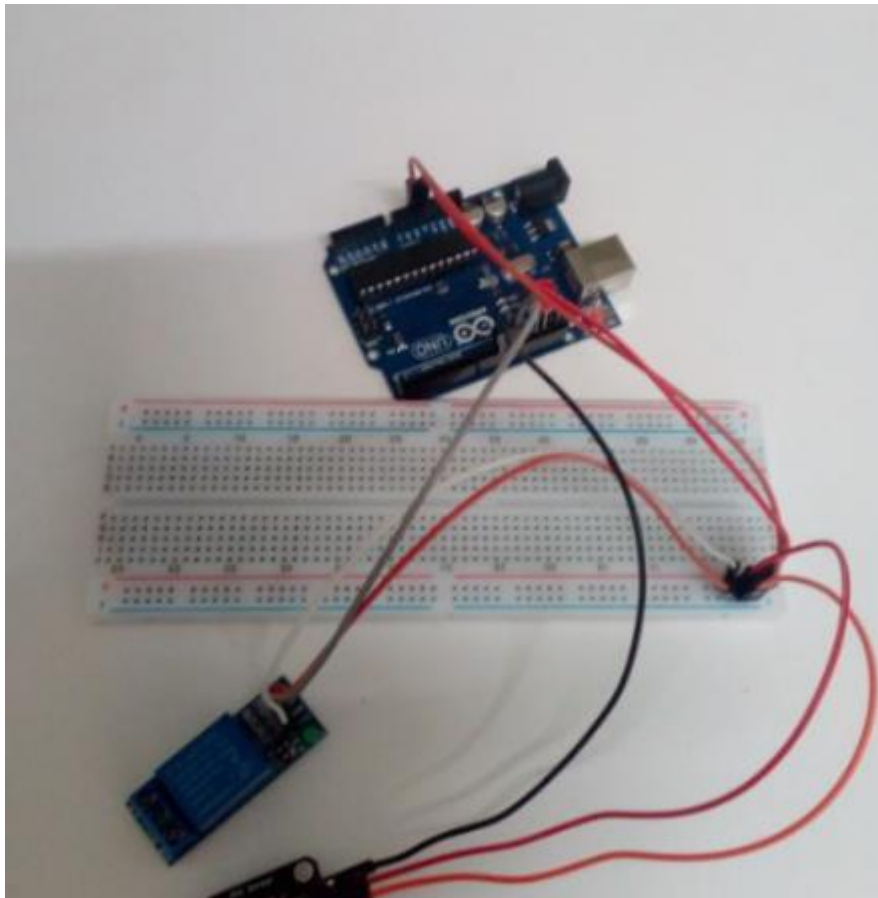


The third step:

Connect the reel power cord to the 5 v port on the breadboard, and the negative power cord to the Gnd port on the breadboard.

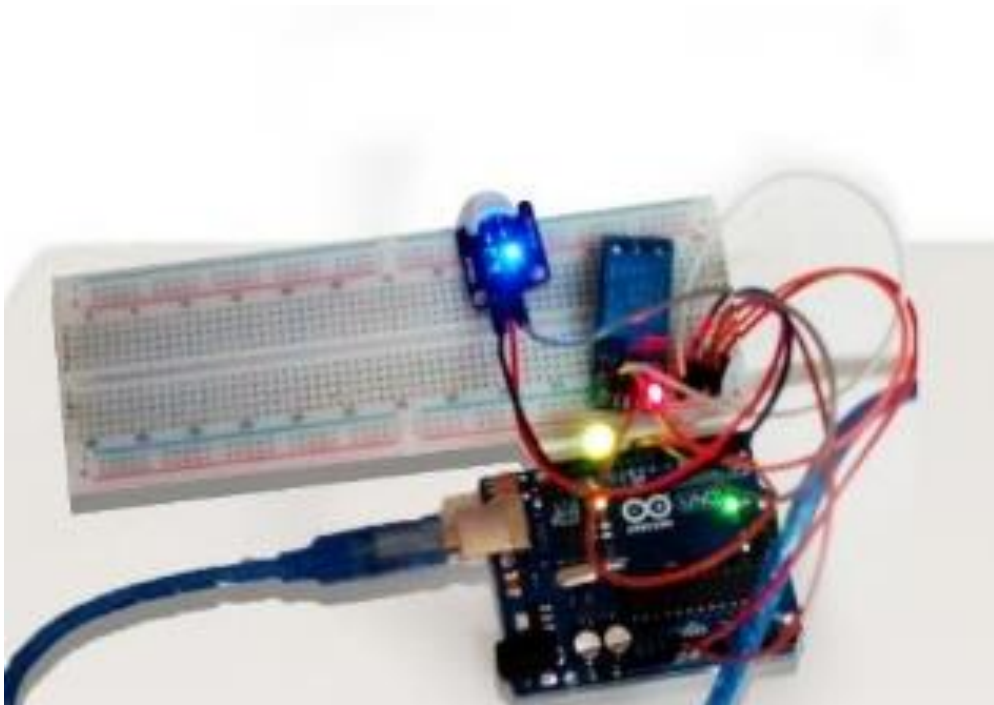
Connect the signal cable to port 10 on the card.

Shown in the image



➡ The fourth step:

Connect the LED's long (+) leg to port 13 and the leg (-) to the Gnd port next to port 13.
Shown in the image.





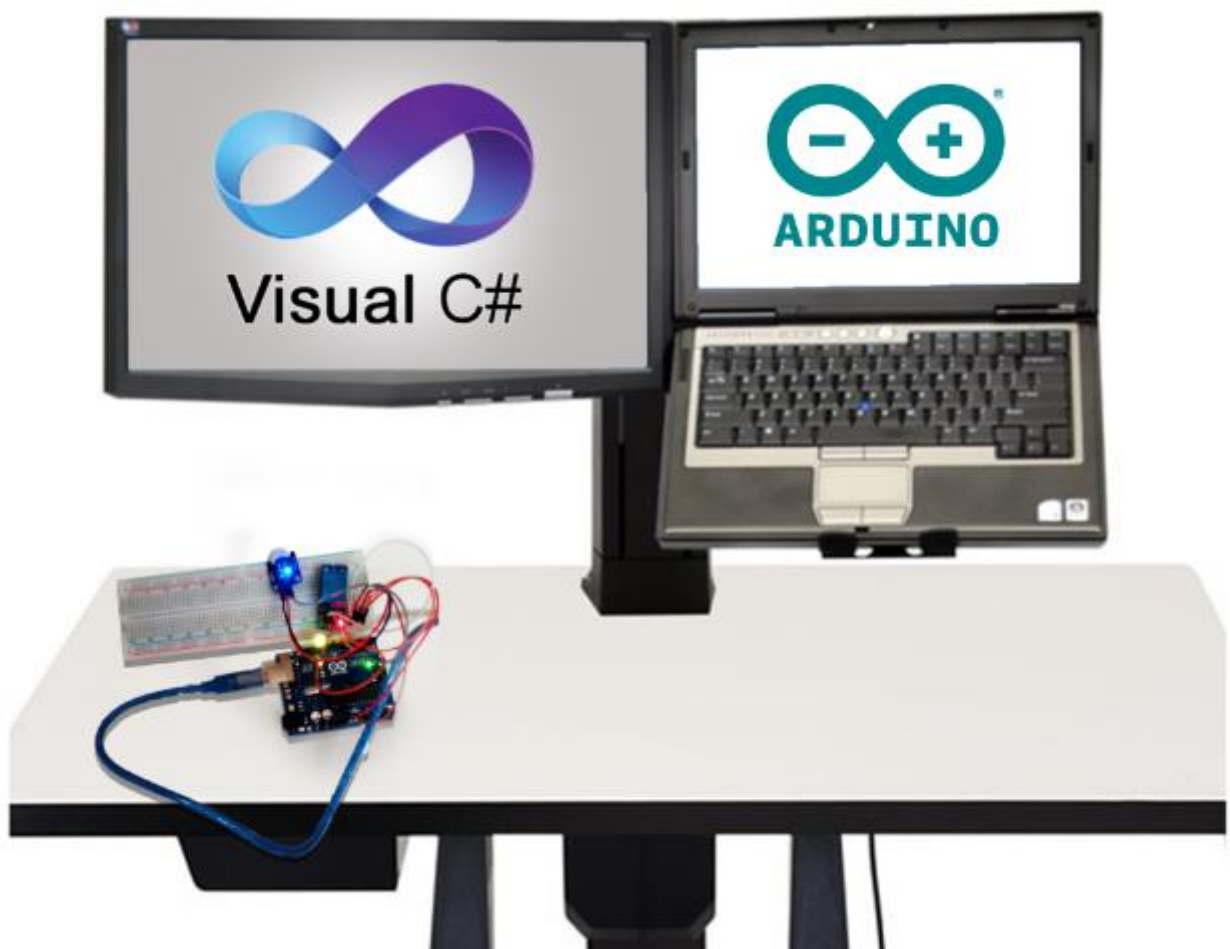
The programming text is written as follows:

When the motion sensor detects any movement in its surroundings, it activates the LED and the relay to connect the power source to the braille-ready supply. Arduino code and c# code on my Github account

<https://github.com/711299244/Homework-AFIFA-KHALED->

Video how to connect this project on my youtube channel

<https://www.youtube.com/watch?v=pePXYfGV05>





Future Work

This is a great starting point for future work with this project. I will be able also to improve it to do a security device against theft, or a device that runs your favourite music while in the room. , etc.

In conjunction with software from other groups this project could be almost fully automated and controlled.

Our Professor we do not have
enough words to thank you
for every second you spent
to taught us .



As much as you taught us
we hope for you more and
more And your dreams
will come true .