INTERFACING HC-SR501 PIR SENSOR WITH ARDUINO NANO

I have interfaced the HC-SR501 PIR (Passive InfraRed) Sensor with the Arduino Nano microcontroller. PIR Sensor is used for sensing motion in many of the automation applications.

Here are the links to read about PIR Sensor:

PIR Sensor Working Principle | How PIR Sensor Works | Robu.in

HC-SR501 PIR Sensor Working, Pinout & Datasheet (components101.com)

The datasheet for the PIR Sensor and the code for interfacing PIR Sensor are attached in the folder.

Now, coming to the hardware part, 3 pins are connected to the microcontroller:

1. The VCC pin of the PIR Sensor is connected to the '3V3' pin (17th pin) of Arduino Nano.
2. The GND pin of the PIR Sensor is connected to the GND pin (4th pin) of Arduino Nano.
3. The O/P pin of the PIR Sensor is connected to the D2 pin (5th pin) of Arduino Nano.

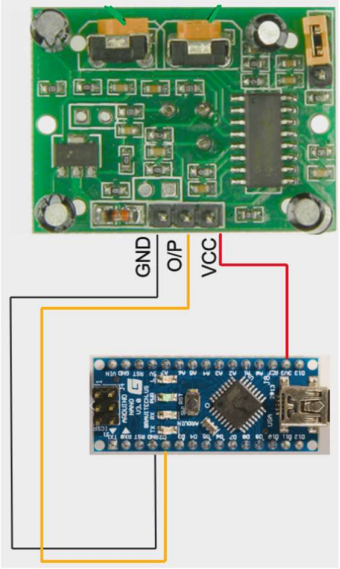

Fig 1: Circuit Diagram

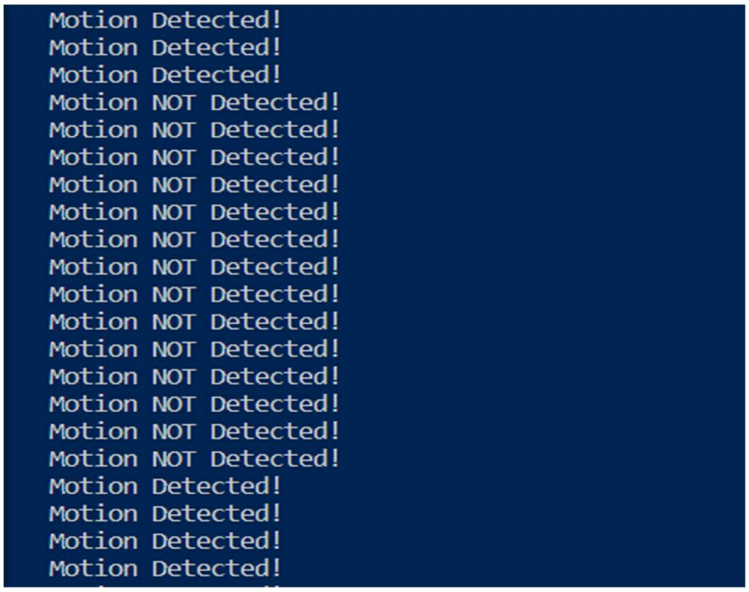

Fig 2: Serial Monitor Output

In some conditions, the output may not be what is desired, in that case, we need to adjust sensitivity and time delay pins.