INTERFACING PIR SENSOR WITH nodemcu ESP 12E MODULE

Ex.No:

Date:

AIM:

To detect the motion using nodemcu board and PIR sensor.

PROCEDURE:

- PIR sensors typically have three pins: Vcc, GND, and OUT.
- Connect the Vcc (power) pin of the PIR sensor to the 3.3V pin on the NodeMCU. This provides power to the PIR sensor.
- Connect the GND (ground) pin of the PIR sensor to any GND pin on the NodeMCU.
- Connect the OUT (output) pin of the PIR sensor to any digital pin on the NodeMCU, for example, D1.
- At last, we can check the interfacing of PIR sensor with Arduino

COMPONENTS REQUIRED:

- Nodemcu ESP 12 Module
- PIR Sensor
- Bread Board
- Jumper Wires
- Micro USB Cable

CONNECTION TABLE:

Nodemcu	PIR Sensor
VV, Vin (+3V)	(V) Vcc (positive +)
G, GND (Ground)	(G) GND (Ground -)
Digital Pin(D1)	Vout pin

SOURCE CODE:

```
int sensor = 4;
void setup(){
   pinMode(sensor, INPUT);
   Serial.begin(9600);
}

void loop(){
   int state = digitalRead(sensor);
      if (state == HIGH){
         Serial.println("Motion detected");
         delay(1000);
      }
      else{
         Serial.println("Motion absent");
         delay(1000);
      }
}
```

OUTPUT:

Serial Monitor
Motion detected
Motion detected
Motion absent
Motion absent
Motion absent
Motion detected
Motion detected

RESULT:

Thus, through the help of PIR sensor interfacing with nodemcu, the motion is detected and recorded.