IOT LAB - 5th Sem

Name : Varad Vithal KJ , USN : 11BM18CS122

Program Title : Passive Infrared Sensor

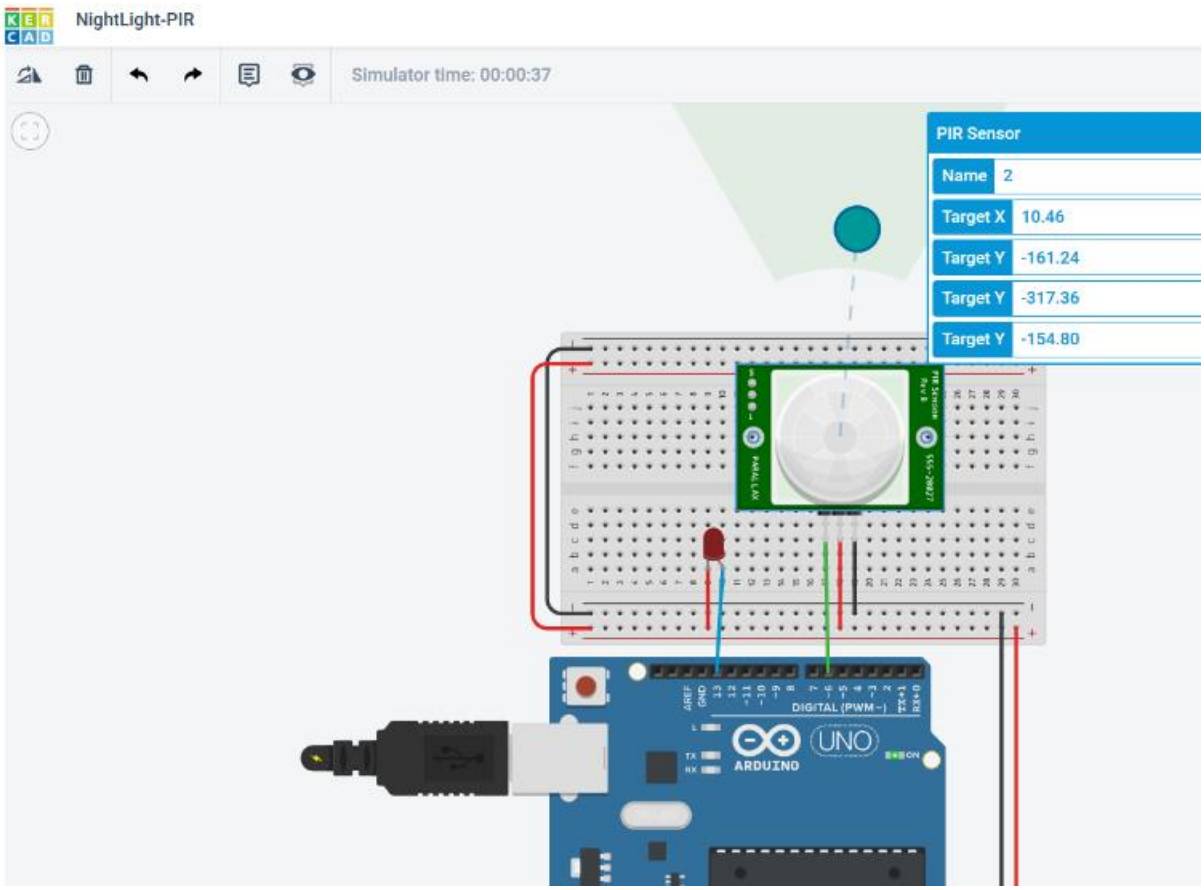
Aim :

To turn on a LED when motion is detected using an Arduino Uno board.

Hardware Required

- Arduino Uno Board
- LED
- PIR
- 330 Ohm Resistor

Circuit Diagram -



Written Code :

1BM18CS122
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NightLight-PIR

```
int led=13;
int sensor=6;
int state=LOW;
int val=0;

  void setup() {
    pinMode(led, OUTPUT);
    pinMode(sensor, INPUT);
    Serial.begin(9600);

{

  void loop() {
    val=digitalRead(sensor);
    if (val== HIGH) {
        digitalWrite(led, HIGH);
        delay(10);

  if (state== LOW) {
```

```
    Serial.println("Motion detected!");
    State = HIGH;
  }
  }
  else {
    digitalWrite(led, LOW);
    delay(10);
  if(State == HIGH){
    Serial.println("Motion stopped!");
    State = LOW;
  }
  }
}
```

Observation /Output:

The LED is turned on when motion is detected.