Lab 3 : Program 7

Date: 30/09/20
Experiment : PIR Sensor
Aim: To use a PIR sensor to detect motion

Hardware:

- Buzzer
- Arduino Uno
- LED
- PIR sensor
- Resistor : 220 Ohm

Source :

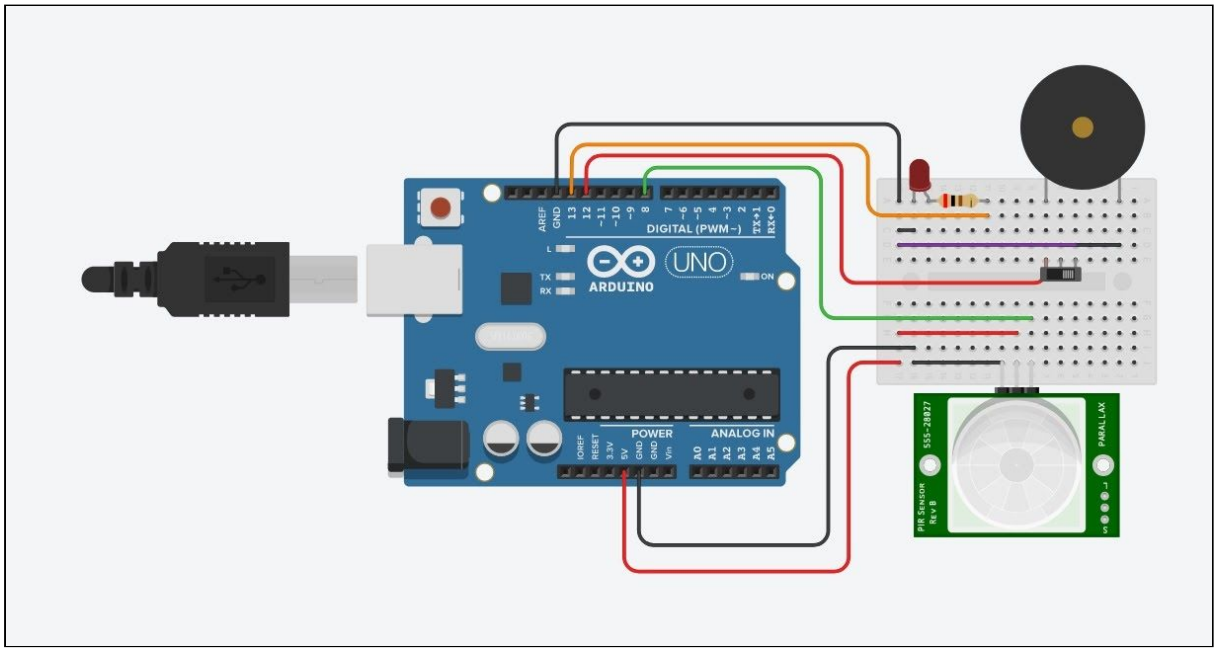
```
int buzzer = 12;
int pir = 8;
int led = 13;
void setup()
{
  pinMode(buzzer, OUTPUT);
  pinMode(pir, INPUT);
  pinMode(led, OUTPUT);
  digitalWrite(pir,LOW);
  Serial.begin(9600);
}

void loop()
{
  if(digitalRead(pir)==HIGH)
  {
   digitalWrite(led,HIGH);
   Serial.println("Motion detected");
    while(digitalRead(pir)==HIGH) {
    digitalWrite(buzzer,HIGH);
        delay(1000);
        digitalWrite(buzzer,LOW);
    }
  }
```

```
  else {
    Serial.println("NO motion detected");
     digitalWrite(led,LOW);
    digitalWrite(buzzer,LOW);
  }
}
```

Observation: The LED glows and Buzzer makes noise when motion is detected.

Circuit:



Write Up :

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Source Code

```
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int led = 13;

void setup()
{ pinMode (buzzer, OUTPUT);
  pinMode (pir, INPUT);
  pinMode (led, OUTPUT);
  digitalWrite(pir, LOW);
  Serial.begin(9600);
}

void loop()
{ if ( digitalRead(pir) == HIGH)
  { digitalWrite (led, HIGH);
    Serial.println ("Motion detected");
    while ( digitalRead (pir) == HIGH)
    { digitalWrite (buzzer, HIGH);
      delay(1000);
      digitalWrite( buzzer, LOW);
    }
  }
  else {
    Serial.println ("No motion detected");
    digitalWrite (led, LOW);
    digitalWrite (buzzer, LOW);
  }
}
```