Personal assistance for seniors who are self reliant
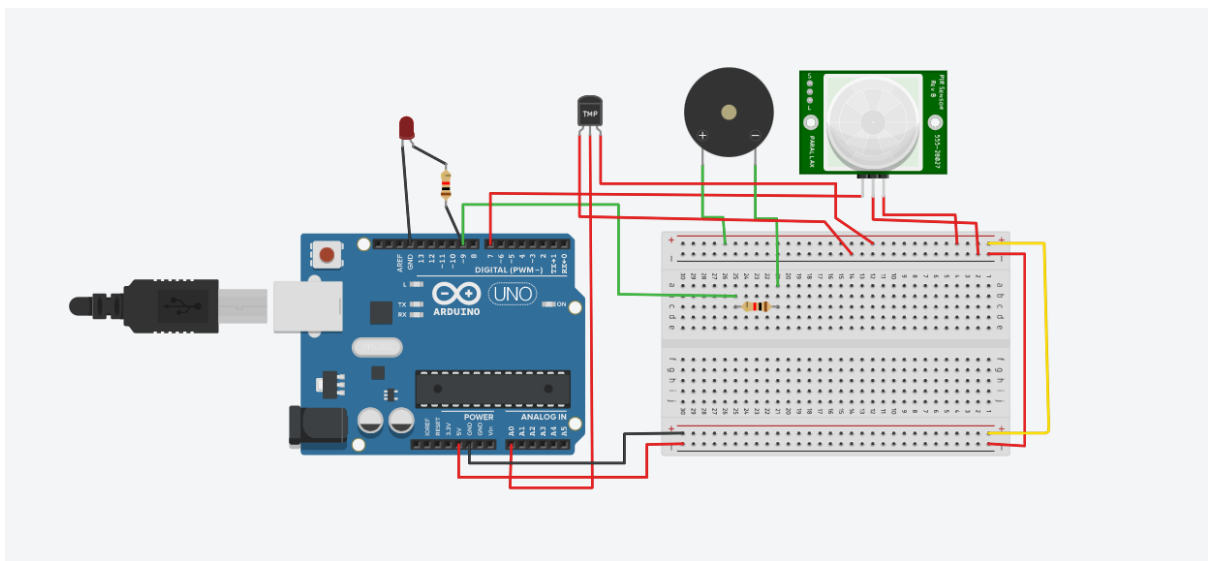
ASSIGNMENT 1

IBM (NALAIYA THIRAN)

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TOPIC: SMART HOME

CIRCUIT DIAGRAM:

CODE:

```
constint buzzer = 9;

intsensePin = A0;

intsensorInput;

double temp;

#define pirPin 7

intcalibrationTime = 30;

long unsigned intlowIn;

long unsigned int pause = 5000;

booleanlockLow = true;
```

```
booleantakeLowTime;
intPIRValue = 0;
void setup(){
Serial.begin(9600);
pinMode(pirPin, INPUT);
pinMode(buzzer, OUTPUT);
}
void loop(){
sensorInput = analogRead(A0);
temp = (double)sensorInput / 1024;
temp = temp * 5;
temp = temp-0.5 ;
temp = temp * 100;
if(temp > 60){
 tone(buzzer, 1000);
 delay(1000);
noTone(buzzer);
 delay(1000);}
Serial.print("Current Temperature: ");
Serial.println(temp);
PIRSensor();
}
void PIRSensor() {
 if(digitalRead(pirPin) == HIGH) {
Serial.print("Motion Detected");
 tone(buzzer, 2000);
 delay(1000);
```

noTone(buzzer);

 delay(1000);}

 }

OUTPUT:

Code | Start Simulation | Send To

Blocks + Text | 1 (Arduino Uno R3)

Serial Monitor

```
ature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
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Motion DetectedCurrent Temperature: 24.71
Motion DetectedCurrent Temperature: 24.71
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Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 78.91
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
Current Temperature: 12.99
```

Send | Clear