

Government College Of Engineering,Bodinayakanur.

Topic:smart home

Code:

```
int lightsensor = A0;
```

```
int pirsensor = 2;
```

```
int buzzer = 4;
```

```
int led=8;
```

```
void setup()
```

```
{
```

```
  pinMode(lightsensor, INPUT);
```

```
  pinMode(pirsensor, INPUT);
```

```
  pinMode(buzzer, OUTPUT);
```

```
  pinMode(led,OUTPUT);
```

```
  Serial.begin(9600);
```

```
}
```

```
void loop()
{
  lightsensor = analogRead(lightsensor);
  pirsensor = digitalRead(pirsensor);
  if (lightsensor < 700) {
    if (pirsensor == HIGH) {
      digitalWrite(led,HIGH);
      digitalWrite(buzzer,HIGH);
      delay(1000);
    } else {
      digitalWrite(buzzer, LOW);
      digitalWrite(led,LOW);
      delay(1000); //
    }
  } else {
    digitalWrite(buzzer, LOW);
    digitalWrite(led,LOW);
    Serial.println(lightsensor);
  }
  delay(1000);
}
```

The screenshot displays a Proteus simulation environment. On the left, an Arduino Uno is connected to a breadboard. The breadboard contains a PIR sensor, a buzzer, and an LED. Wires connect the sensor's output to the Arduino's digital pin 2, the buzzer to pin 4, and the LED to pin 5. A data table for the PIR sensor is shown, indicating a detected target at coordinates (108.19, -178.67) with a velocity of -235.05. The code on the right is as follows:

```

1 // C++ code
2 //
3 int lightsensor = A0;
4 int pirsensor = 2;
5 int buzzer = 4;
6 int led = 5;
7
8 void setup()
9 {
10   pinMode(lightsensor, INPUT);
11   pinMode(pirsensor, INPUT);
12   pinMode(buzzer, OUTPUT);
13   pinMode(led, OUTPUT);
14   Serial.begin(9600);
15 }
16
17 void loop()
18 {
19   lightsensor = analogRead(lightsensor);
20   pirsensor = digitalRead(pirsensor);
21   if (lightsensor < 700) {
22     if (pirsensor == HIGH) {
23       digitalWrite(led, HIGH);
24       digitalWrite(buzzer, HIGH);
25       delay(1000);
26     } else {
27       digitalWrite(buzzer, LOW);
28       digitalWrite(led, LOW);
29       delay(1000); // Wait for 1000 milliseconds
30     }
31   } else {
32     digitalWrite(buzzer, LOW);
33     digitalWrite(led, LOW);
34     Serial.println(lightsensor);
35   }
36 }

```