

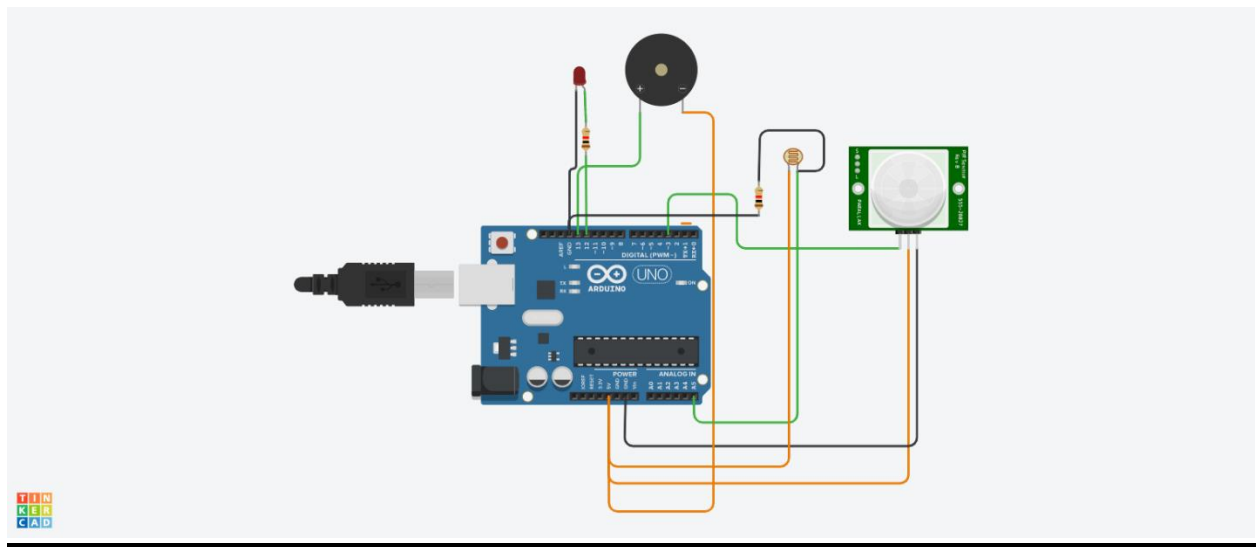
IBM

Smart Home Automation Assignment – 1

Tinker Cad:

<https://www.tinkercad.com/things/j8TqIR2TaL3-super-lahdi-allis/editel?sharecode=GzB22dIHxG5dxx6WNwoDoJVqukyRNnoFcpyNVHVuXhw>

Circuit Diagram:



Source Code:

```
int led = 12;  
int buzzer = 13;  
int Msensor = 3;  
int Lsensor = A5;  
int Lval = 0;  
int Mval = 0;  
int Threshold = 400;
```

```

void setup() {
    pinMode(led, OUTPUT);
    pinMode(buzzer, OUTPUT);
    pinMode(Lsensor, INPUT);
    pinMode(Msensor, INPUT);
    Serial.begin(9600);
}

void loop()
{
    delay(1000);
    Serial.println("!!!!!!!!!!!!!!!!!!!!!!!!!!!!");
    Lval = analogRead(Lsensor);
    Serial.println(Lval);    //Light Intensity
    if (Lval > Threshold)
    {
        digitalWrite(led, LOW);
        Serial.println("Day Time");
    }
    else
    {
        digitalWrite(led, HIGH);
        Serial.println("Night Time");
    }
    Mval = digitalRead(Msensor);
    if(Mval == HIGH)
    {
        tone(buzzer,1000);
    }
}

```

```
    Serial.println("Motion is Detected");  
}  
else  
{  
    tone(buzzer,0);  
    Serial.println("No Motion");  
}  
}
```