

## Assignment -1

### SMART HOME USING TINKERCAD

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

#### Question-1:

MAKE A SMART HOME IN TINKERCAD, 2 SENSORS LED, BUZZER IN SINGLE CODE CIRCUIT.

#### Solution:

##### 1. Circuit Diagram:

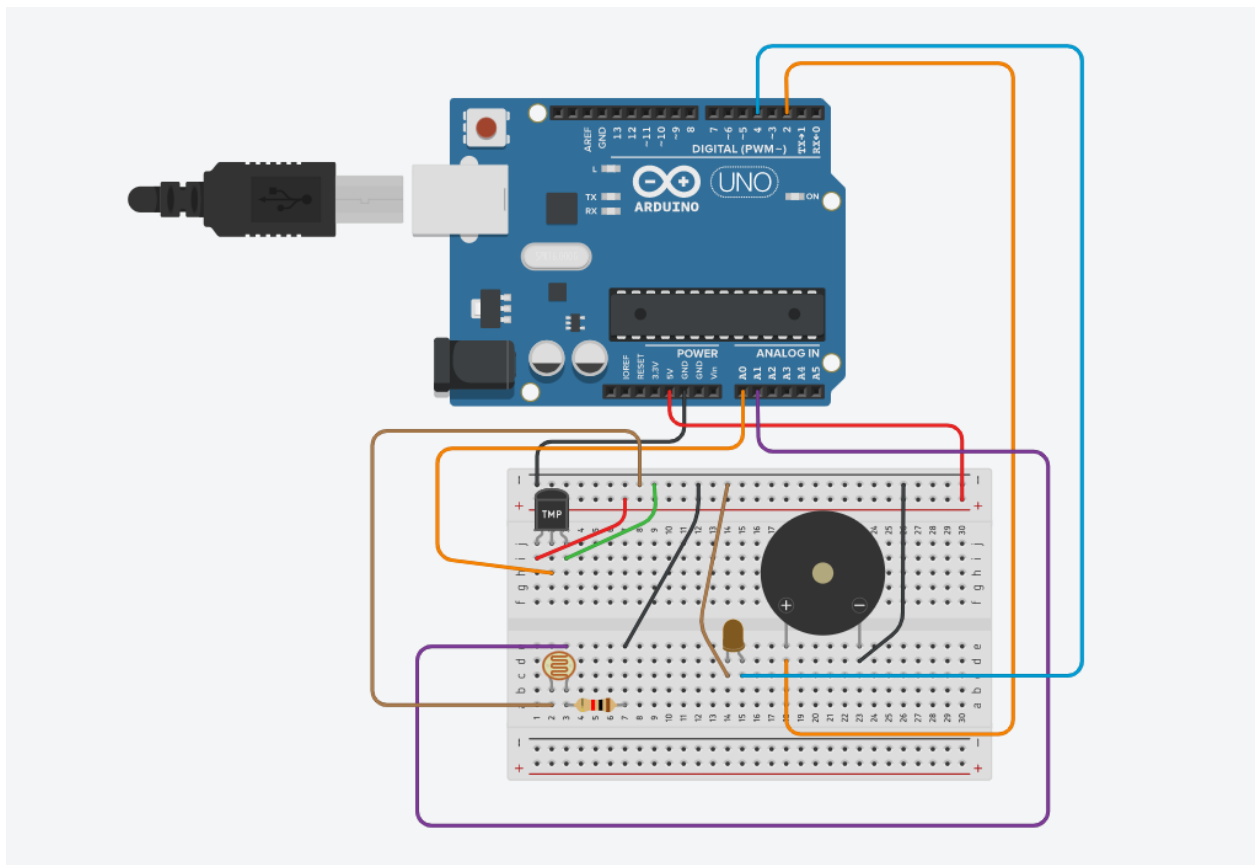


fig 1 : Circuit Construction

## 2. Implementation Code:

```
int temperaturePin = 0;
int buzzer = 2;
int led = 4;
void setup()
{
  Serial.begin(9600);
  pinMode(buzzer, OUTPUT);
  pinMode(led, OUTPUT);
}

void loop()
{
  float temperature;
  int lightRead = analogRead(A1);
  temperature = analogRead(temperaturePin);
  temperature = temperature * 0.48828125;
  Serial.println("Temperature : ");
  Serial.println(temperature);
  Serial.println("Light : ");
  Serial.println(lightRead);
  if(temperature>74){
    digitalWrite(buzzer, HIGH);
  }
  else{
    digitalWrite(buzzer, LOW);
  }
  if(lightRead<900){
    digitalWrite(led, HIGH);
  }
  else{
    digitalWrite(led, LOW);
  }
}
```

### 3. Working of circuit

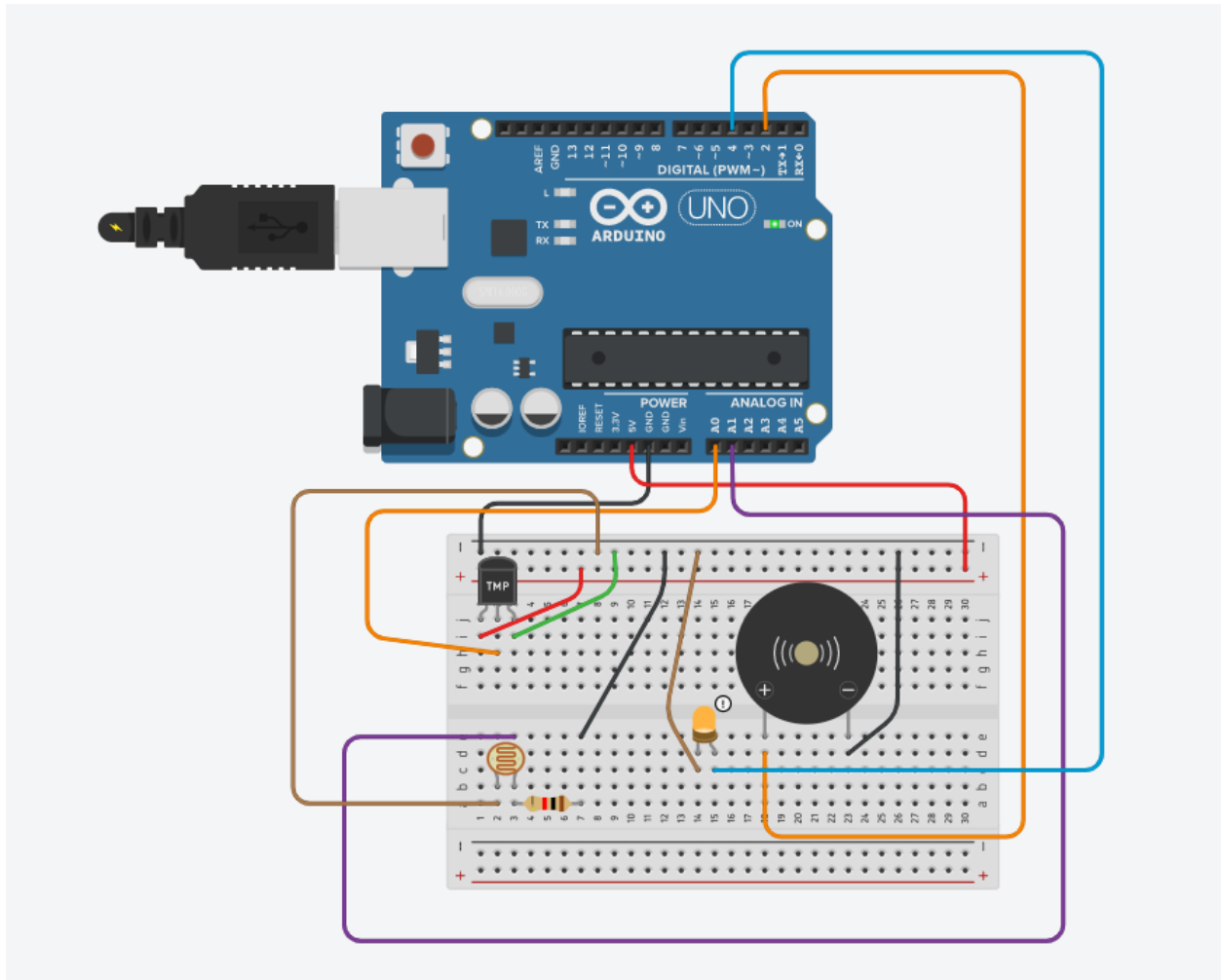


fig 2 : Circuit Working