

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:

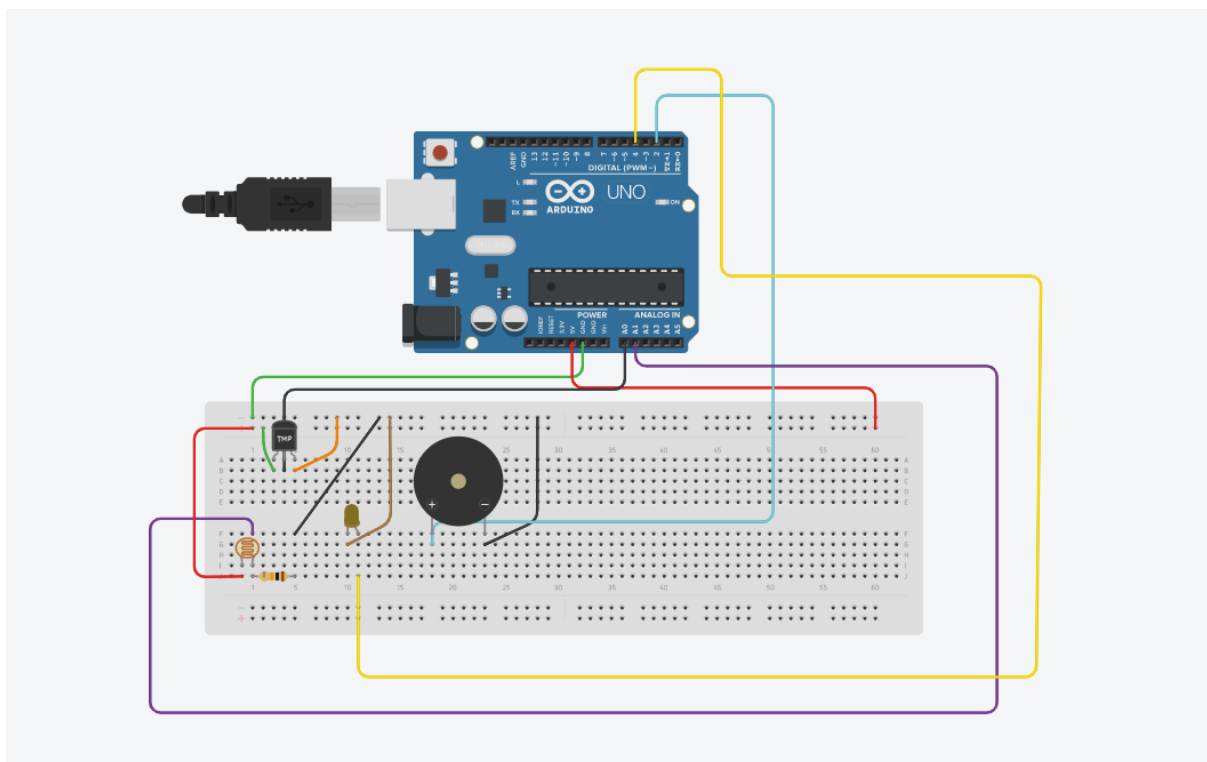


fig 1 : Circuit Construction

2. Implementation Code:

```
int tempPin = 0;
int buzzerPin = 2;
int ledOut = 4;
void setup()
{
  Serial.begin(9600);
  pinMode(buzzerPin, OUTPUT);
  pinMode(ledOut, OUTPUT);
}

void loop()
{
  float temp;
  int lightVal = analogRead(A1);
  temp = analogRead(tempPin);
  temp = temp * 0.48828125;
  Serial.print("TEMPERATURE = ");
  Serial.print(temp);
  Serial.print("*C");
  Serial.println();
  Serial.println(lightVal);
  if(temp>74){
    digitalWrite(buzzerPin, HIGH);
  }
  else{
    digitalWrite(buzzerPin, LOW);
  }
  if(lightVal<900){
    digitalWrite(ledOut, HIGH);
  }
  else{
    digitalWrite(ledOut, LOW);
  }
}
```

3. Working of circuit

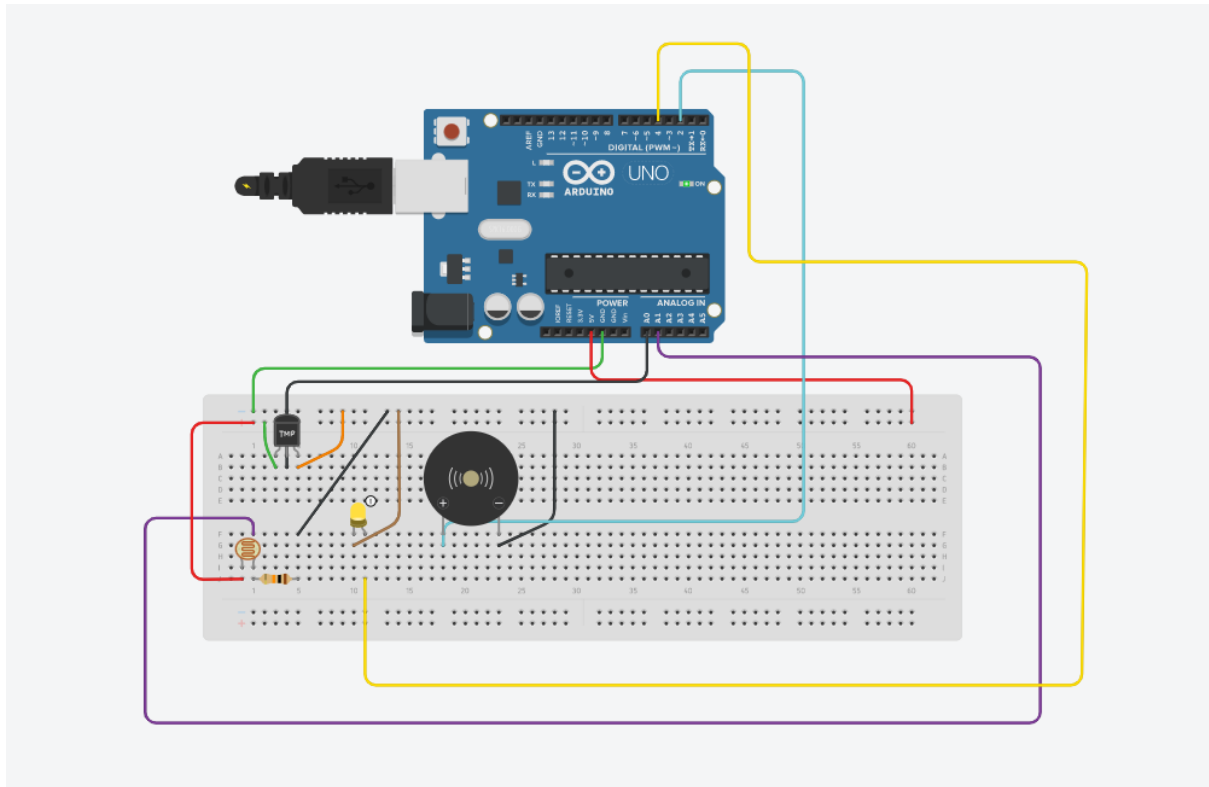


fig 2 : Circuit Working