**Assignment 1**

Smart home using tinkercad

|  |
| --- |
| #include<Servo.h> |
|  | Servo Myservo; |
|  | int state=0; |
|  |  |
|  | float temp; |
|  | int buzz=8; |
|  | void setup() |
|  | { |
|  | Myservo.attach(4); |
|  | pinMode(2,INPUT); |
|  | pinMode(13, OUTPUT); |
|  | pinMode(A0, INPUT); |
|  | //pinMode(4,OUTPUT); |
|  | pinMode(A1,INPUT); |
|  | pinMode(buzz,OUTPUT); |
|  | Serial.begin(9600); |
|  |  |
|  | } |
|  |  |
|  | void loop() |
|  | { |
|  | state = digitalRead(2); |
|  | temp = analogRead(A0); |
|  | int val = analogRead(A1); |
|  | temp = (temp \*5.0\*100.0)/1024.0; |
|  | if(state==HIGH){ |
|  | digitalWrite(13, HIGH); |
|  | } |
|  | else{ |
|  | digitalWrite(13, LOW); |
|  | } |
|  | if (val <500 ) |
|  | {digitalWrite (buzz, LOW);} |
|  | else |
|  | {digitalWrite(buzz, HIGH);} |
|  | if(temp > 25){ |
|  | Myservo.write(180); |
|  | } |
|  | else{ |
|  | Myservo.write(0); |
|  | } |
|  |  |
|  |  |
|  | } |

Circuit:

