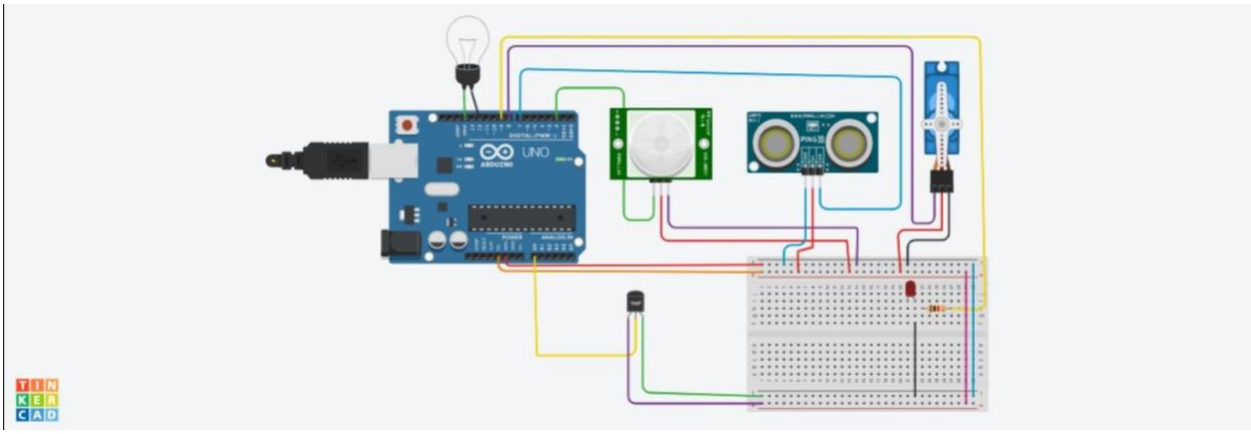
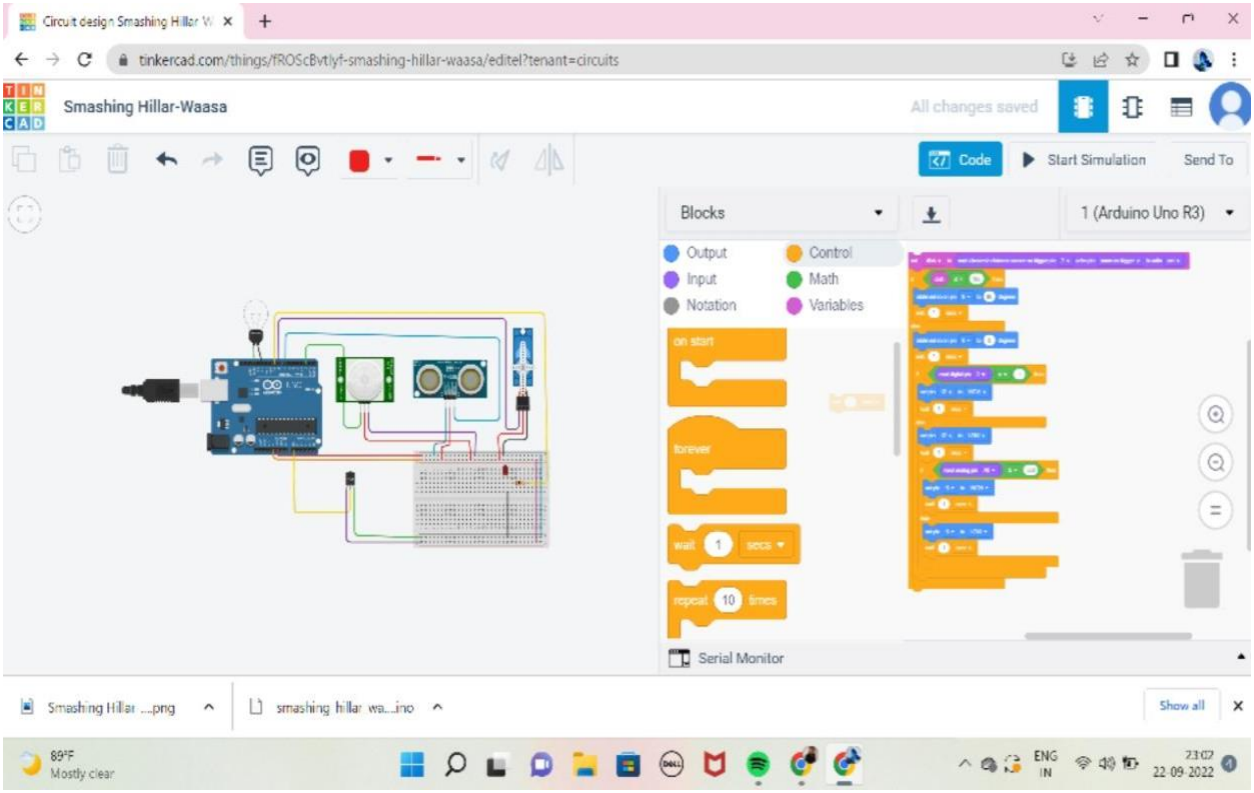
SMART HOME AUTOMATION SYSTEM USING ARDUINO IN IOT



COMPOENTS:

- **ULTRASONIC DISTANCE SENSOR**
- **BULB**
- **RESISTOR**
- **LED**
- **BREADBOARD SMALL**
- **ARDUINO UNO**
- **PIR SENSOR**
- **MICRO SERVO**
- **TEMPARATURE SENSOR (TMP30)**


Circuit design Smashing Hillar W
tinkercad.com/things/fROScBvtlyf-smashing-hillar-waasa/editel?tenant=circuits
Smashing Hillar-Waasa
All changes saved
Code
Start Simulation
Send To
Blocks
1 (Arduino Uno R3)
Output
Input
Notation
Control
Math
Variables
on start
forever
wait 1 secs
repeat 10 times
Serial Monitor
Smashing Hillar ....png
smashing hillar wa...ino
Show all
89°F
Mostly clear
ENG
IN
23:07
22-09-2022

CODING:

```
#include <Servo.h>
Int dish = 0;
Long readUltrasonicDistance(int triggerPin, int echoPin)
{
  pinMode(triggerPin, OUTPUT);  // Clear the trigger
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(2);
  // Sets the trigger pin to HIGH state for 10 microseconds
  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(triggerPin, LOW);
  pinMode(echoPin, INPUT);
  // Reads the echo pin, and returns the sound wave travel time in microseconds
  Return pulseIn(echoPin, HIGH);
}
Servo servo_8;
Void setup()
{
  Servo_8.attach(8, 500, 2500);
  pinMode(2, INPUT);
  pinMode(12, OUTPUT);
  pinMode(A0, INPUT);
  pinMode(9, OUTPUT);
}
Void loop()
{
  Dish = 0.01723 * readUltrasonicDistance(7, 7);
  If (dish <= 100) {
```

```
   Servo_8.write(90);
   Delay(1000); // Wait for 1000 millisecond(s)
  } else {
   Servo_8.write(0);
   Delay(1000); // Wait for 1000 millisecond(s)
   If (digitalRead(2) == 1) {
    digitalWrite(12, HIGH);
    delay(1000); // Wait for 1000 millisecond(s)
   } else {
    digitalWrite(12, LOW);
    delay(1000); // Wait for 1000 millisecond(s)
    if (analogRead(A0) >= 300) {
     digitalWrite(9, HIGH);
   delay(1000); // Wait for 1000 millisecond(s)
    } else {
     digitalWrite(9, LOW);
      delay(1000); // Wait for 1000 millisecond(s)
    }
   }
  }
Delay(1000); // Wait for 1000 millisecond(s)
}
```