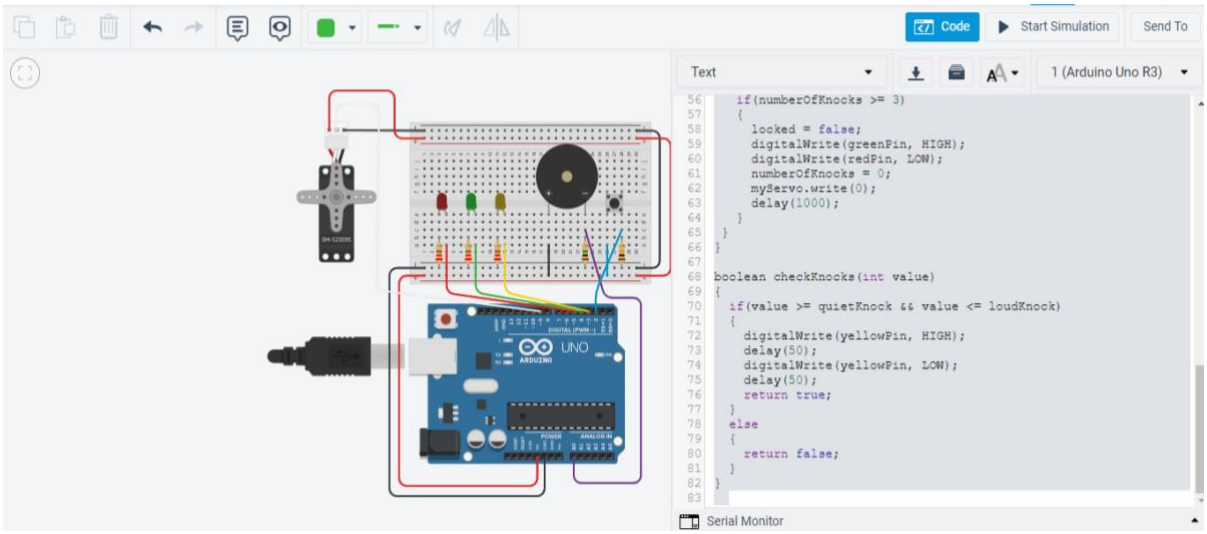
Code
Start Simulation
Send To
Text
1 (Arduino Uno R3)
if(numberOfKnocks >= 3)
{
locked = false;
digitalWrite(greenPin, HIGH);
digitalWrite(redPin, LOW);
numberOfKnocks = 0;
myServo.write(0);
delay(1000);
}
}
}
boolean checkKnocks(int value)
{
if(value >= quietKnock && value <= loudKnock)
{
digitalWrite(yellowPin, HIGH);
delay(50);
digitalWrite(yellowPin, LOW);
delay(50);
return true;
}
else
{
return false;
}
}
Serial Monitor

```
#include <Servo.h>
Servo myServo;

const int piezoPin = A0;
const int switchPin = 2;
const int servoPin = 9;
const int yellowPin = 3;
const int greenPin = 4;
const int redPin = 5;

int piezoVal;
int switchVal;

const int quietKnock = 10;
const int loudKnock = 100;

int numberOfKnocks = 0;
boolean locked = false;

void setup()
{
  pinMode(switchPin, INPUT);
  pinMode(yellowPin, OUTPUT);
  pinMode(greenPin, OUTPUT);
  pinMode(redPin, OUTPUT);
  myServo.attach(servoPin);
  digitalWrite(greenPin, HIGH);
  myServo.write(0);
  delay(1000);
}
```

```
void loop()
{
 if(locked == false)
 {
  switchVal = digitalRead(switchPin);
  if(switchVal == HIGH)
  {
   locked = true;
   digitalWrite(greenPin, LOW);
   digitalWrite(redPin, HIGH);
   myServo.write(90);
   delay(1000);
  }
 }
 if(locked == true)
 {
  piezoVal = analogRead(piezoPin);
  if(piezoVal > 0 && numberOfKnocks < 3)
  {
   if(checkKnocks(piezoVal) == true)
   {
    numberOfKnocks++;
   }
  }
  if(numberOfKnocks >= 3)
  {
   locked = false;
   digitalWrite(greenPin, HIGH);
   digitalWrite(redPin, LOW);
   numberOfKnocks = 0;
   myServo.write(0);
```

```
    delay(1000);
  }
 }
}

boolean checkKnocks(int value)
{
 if(value >= quietKnock && value <= loudKnock)
 {
          digitalWrite(yellowPin, HIGH);
   delay(50);
   digitalWrite(yellowPin, LOW);
   delay(50);
   return true;
 }
 else
 {
   return false;
 }
}
```