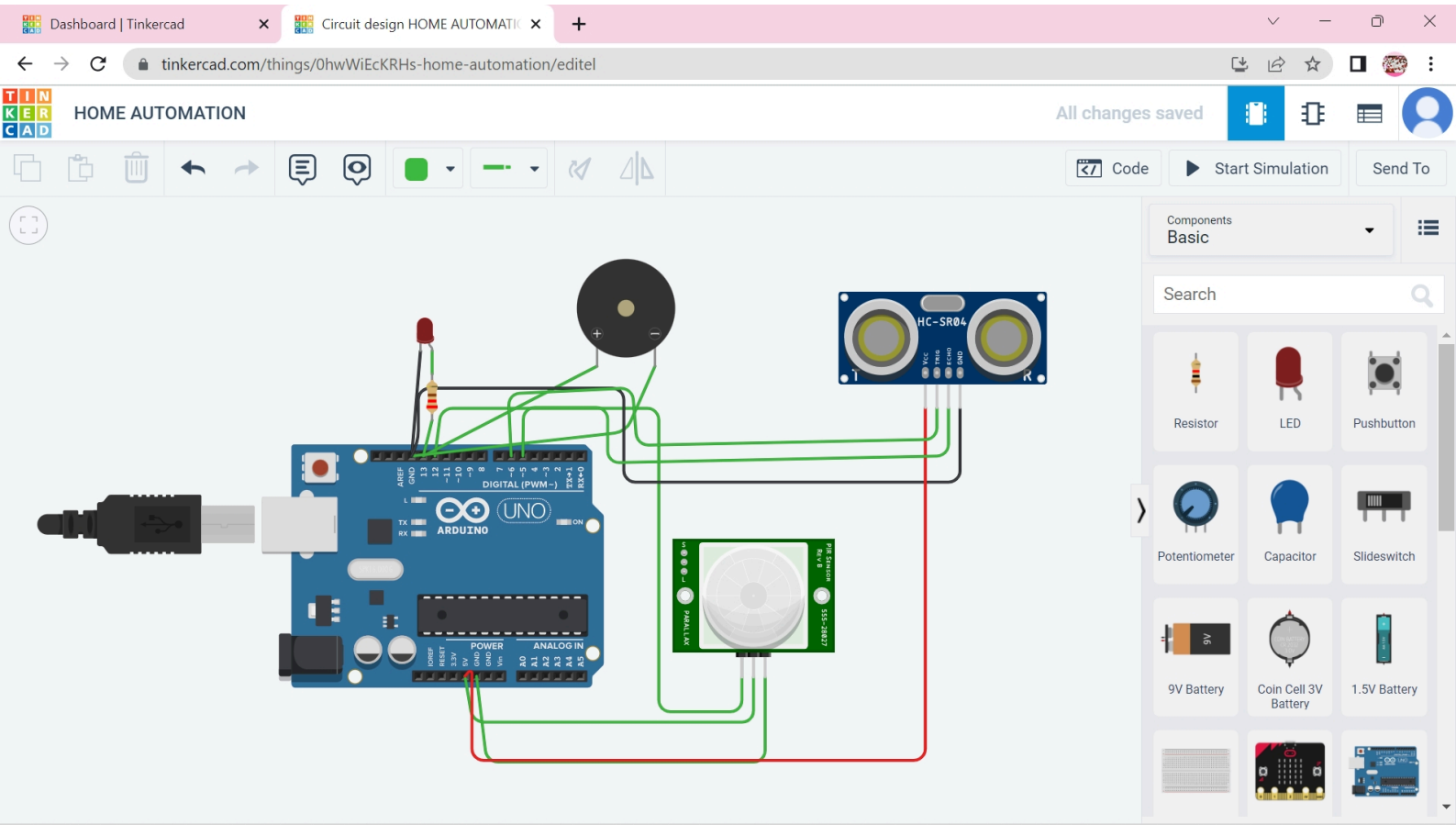
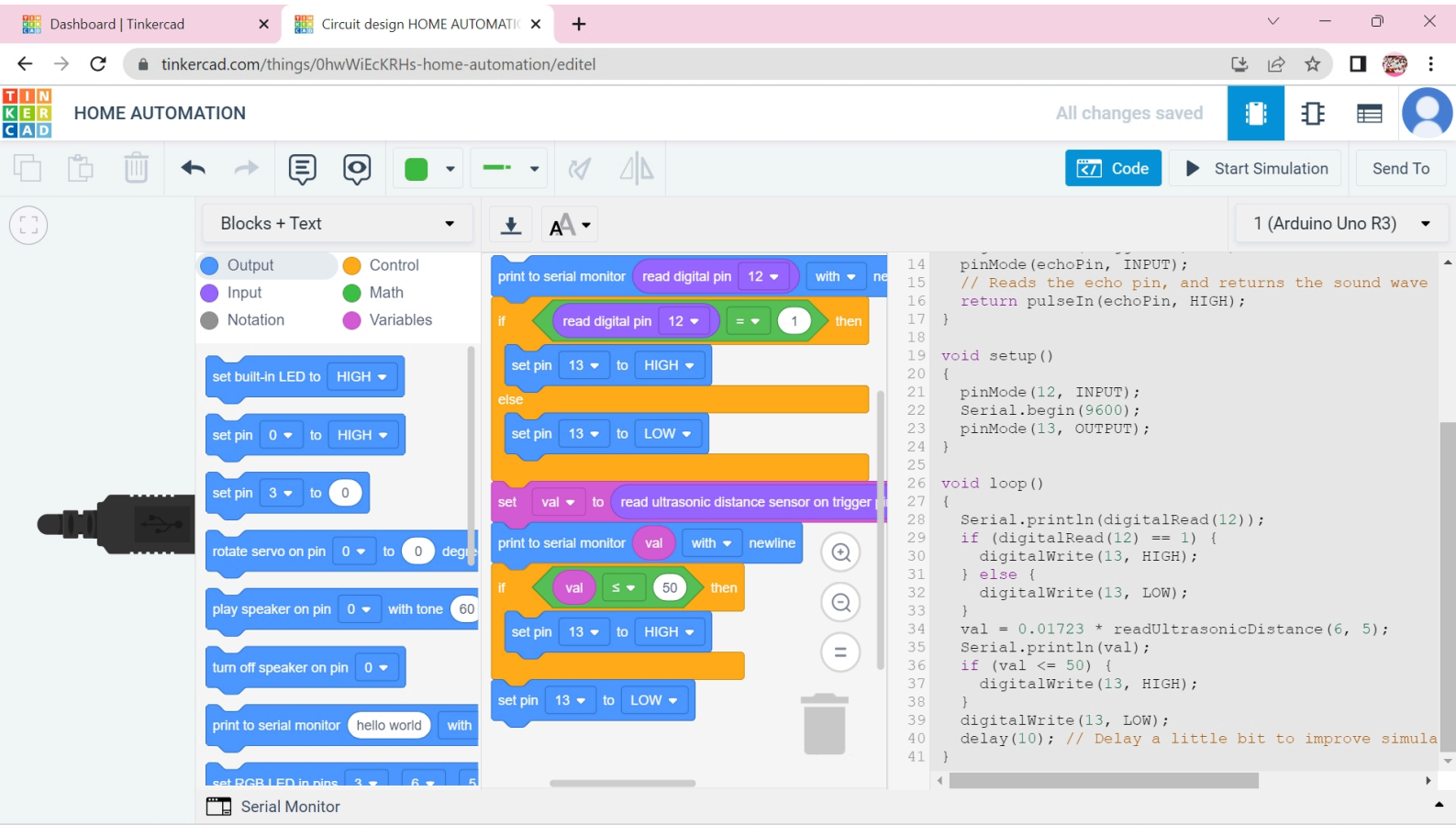

Dashboard | Tinkercad
Circuit design HOME AUTOMATI
tinkercad.com/things/0hwWiEcKRHs-home-automation/editel
HOME AUTOMATION
All changes saved
Code
Start Simulation
Send To
Components
Basic
Search
HC-SR04
Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch
9V Battery
Coin Cell 3V Battery
1.5V Battery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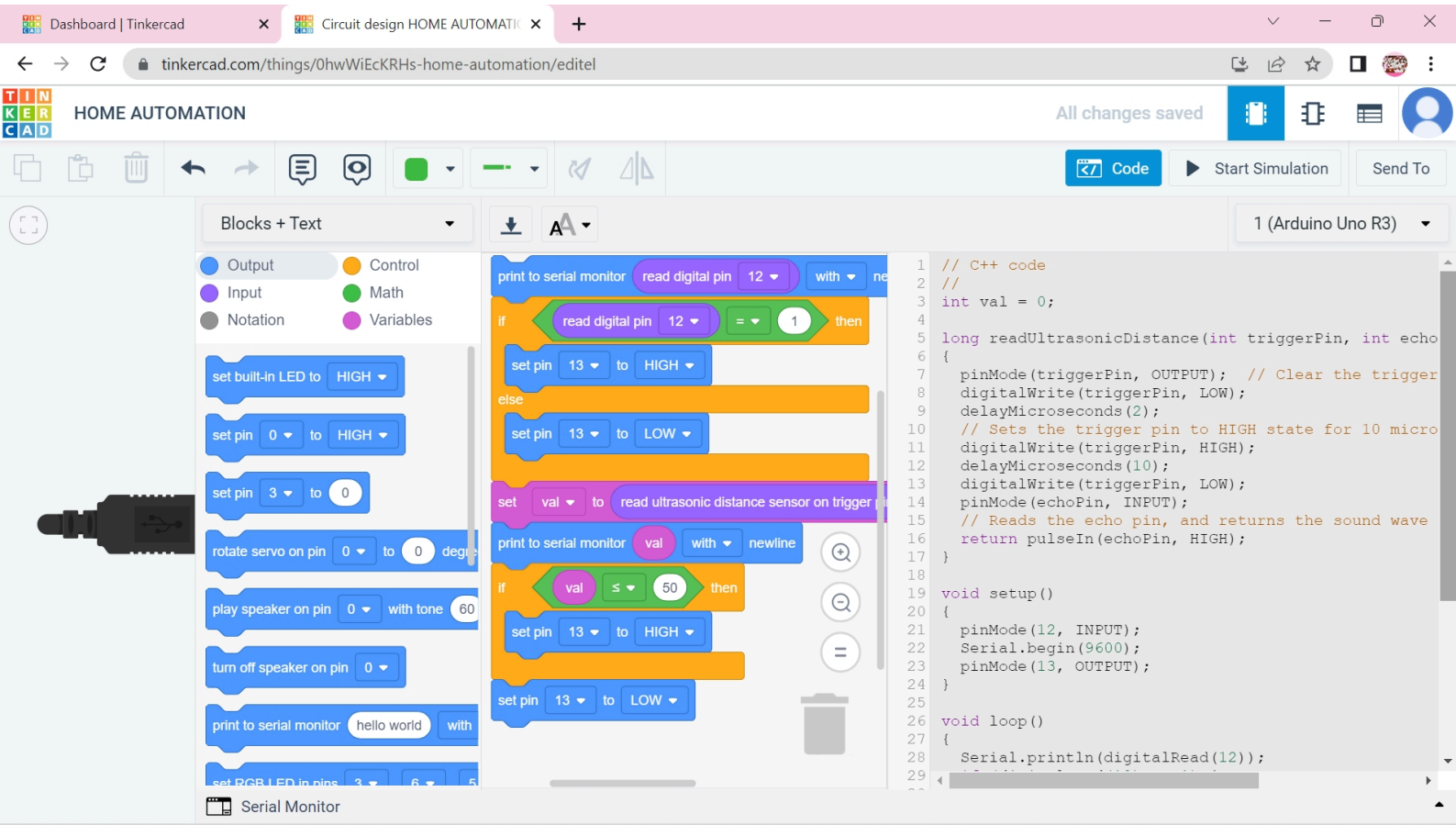
HOME AUTOMATION
All changes saved
Code
Start Simulation
Send To
Blocks + Text
1 (Arduino Uno R3)
Output
Control
Input
Math
Notation
Variables
set built-in LED to HIGH
set pin 0 to HIGH
set pin 3 to 0
rotate servo on pin 0 to 0
play speaker on pin 0 with tone 60
turn off speaker on pin 0
print to serial monitor hello world with
print to serial monitor read digital pin 12 with
if read digital pin 12 = 1 then
set pin 13 to HIGH
else
set pin 13 to LOW
set val to read ultrasonic distance sensor on trigger
print to serial monitor val with newline
if val ≤ 50 then
set pin 13 to HIGH
set pin 13 to LOW
pinMode(echoPin, INPUT);
// Reads the echo pin, and returns the sound wave
return pulseIn(echoPin, HIGH);
}
void setup()
{
pinMode(12, INPUT);
Serial.begin(9600);
pinMode(13, OUTPUT);
}
void loop()
{
Serial.println(digitalRead(12));
if (digitalRead(12) == 1) {
digitalWrite(13, HIGH);
} else {
digitalWrite(13, LOW);
}
val = 0.01723 * readUltrasonicDistance(6, 5);
Serial.println(val);
if (val <= 50) {
digitalWrite(13, HIGH);
}
digitalWrite(13, LOW);
delay(10); // Delay a little bit to improve simula
}
Serial Monitor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set pin 13 to LOW
set val to read ultrasonic distance sensor on trigger
print to serial monitor val with newline
if val ≤ 50 then
set pin 13 to HIGH
set pin 13 to LOW
// C++ code
//
int val = 0;
long readUltrasonicDistance(int triggerPin, int echo
{
pinMode(triggerPin, OUTPUT); // Clear the trigger
digitalWrite(triggerPin, LOW);
delayMicroseconds(2);
// Sets the trigger pin to HIGH state for 10 micro
digitalWrite(triggerPin, HIGH);
delayMicroseconds(10);
digitalWrite(triggerPin, LOW);
pinMode(echoPin, INPUT);
// Reads the echo pin, and returns the sound wave
return pulseIn(echoPin, HIGH);
}
void setup()
{
pinMode(12, INPUT);
Serial.begin(9600);
pinMode(13, OUTPUT);
}
void loop()
{
Serial.println(digitalRead(12));
Serial Monitor