ASSIGNMENT-2

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REG NO: 19BEC0513

CODE:

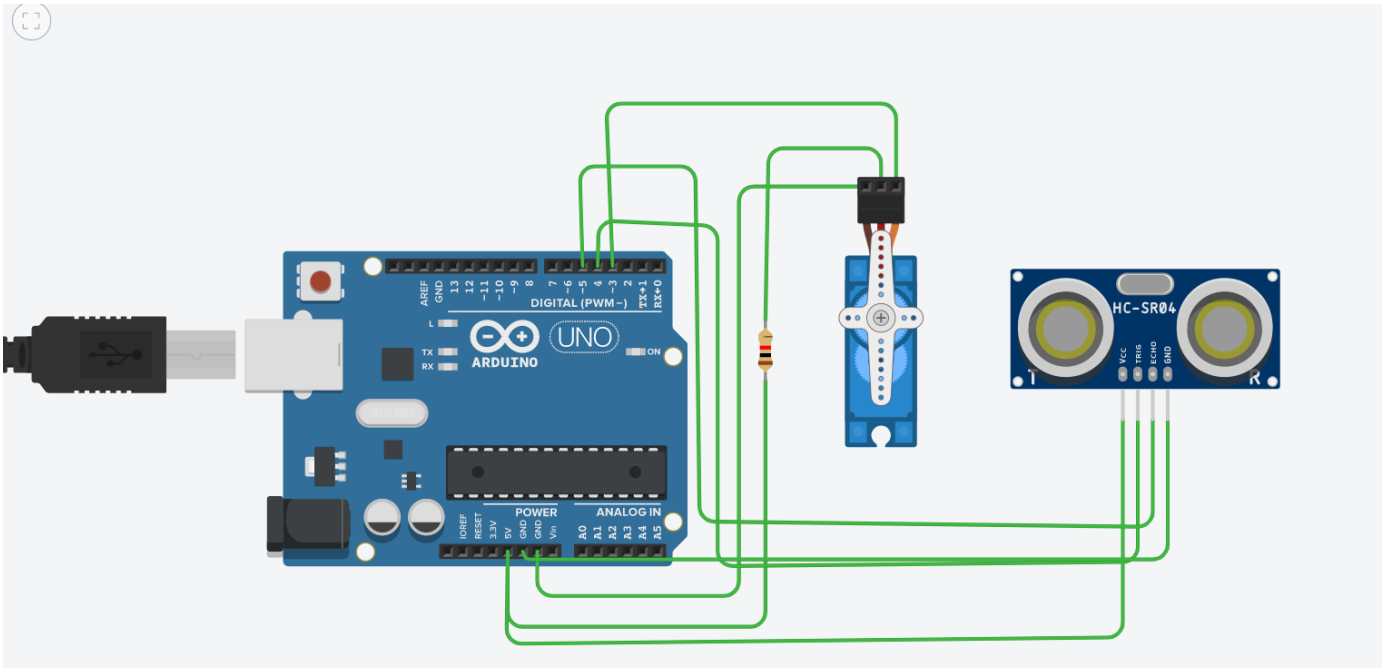
```
#include<Servo.h>
Servo s;
int t=4;
int e=5;
void setup()
{
  s.attach(3);
  pinMode(t, OUTPUT);
  pinMode(e, INPUT);
  Serial.begin(9600);
  s.write(0);
}

void loop()
{
  digitalWrite(t, LOW);
  digitalWrite(t, HIGH);
  delayMicroseconds(10);
  digitalWrite(t, LOW);
  float dur = pulseIn(e, HIGH);
```

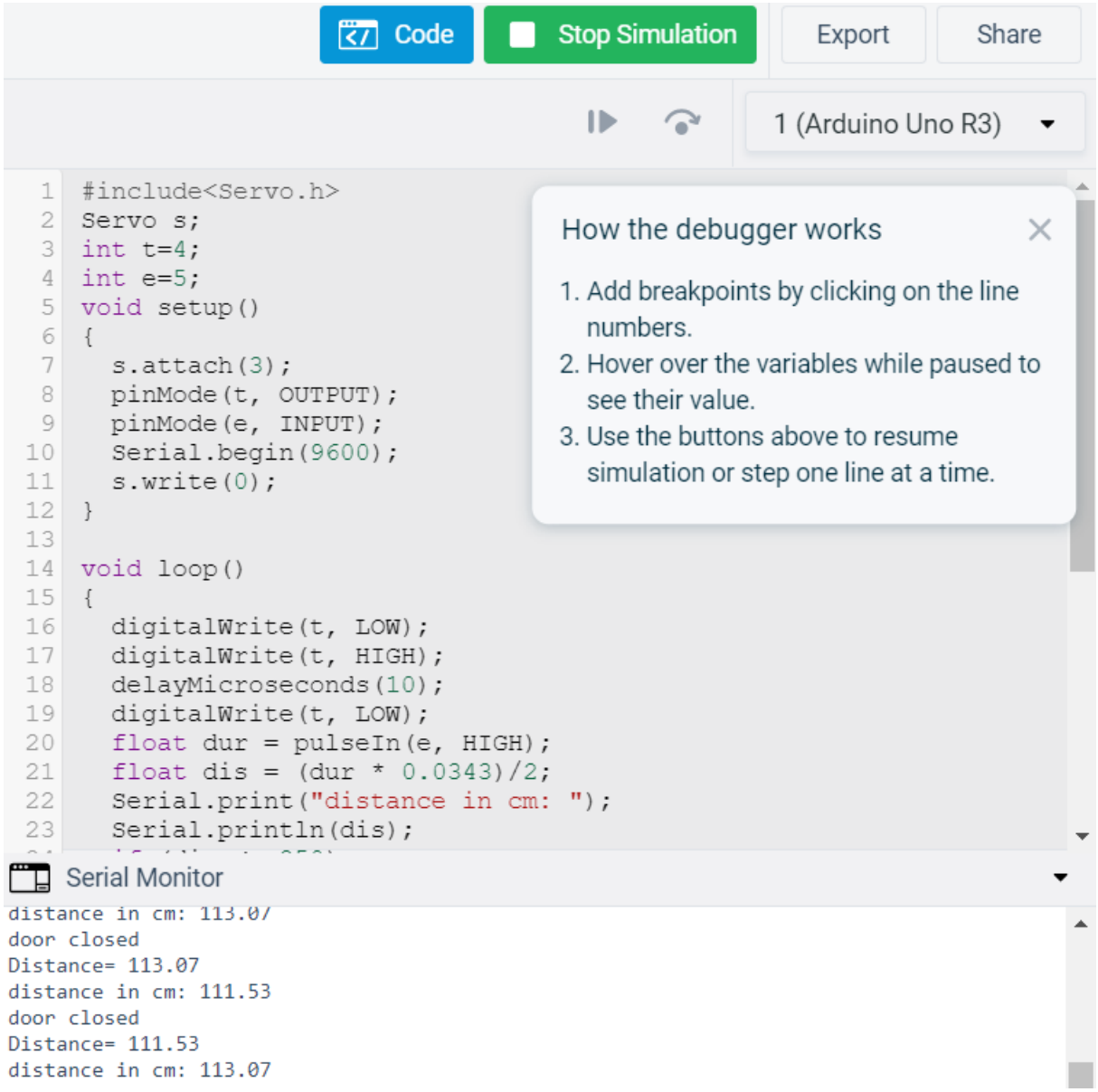
```
  float dis = (dur * 0.0343)/2;
  Serial.print("distance in cm: ");
  Serial.println(dis);
  if (dis <= 250)
            {
              Serial.println("door closed");
              Serial.print("Distance= ");
              Serial.println(dis);
              delay(100);
            }
  else{
    Serial.print("door open");
    Serial.print("Distance= ");
    Serial.println(dis);
    delay(100);

  }
}
```

CIRCUIT:


DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN
HC-SR04
VCC
TRIG
ECHO
GND

OUTPUT:

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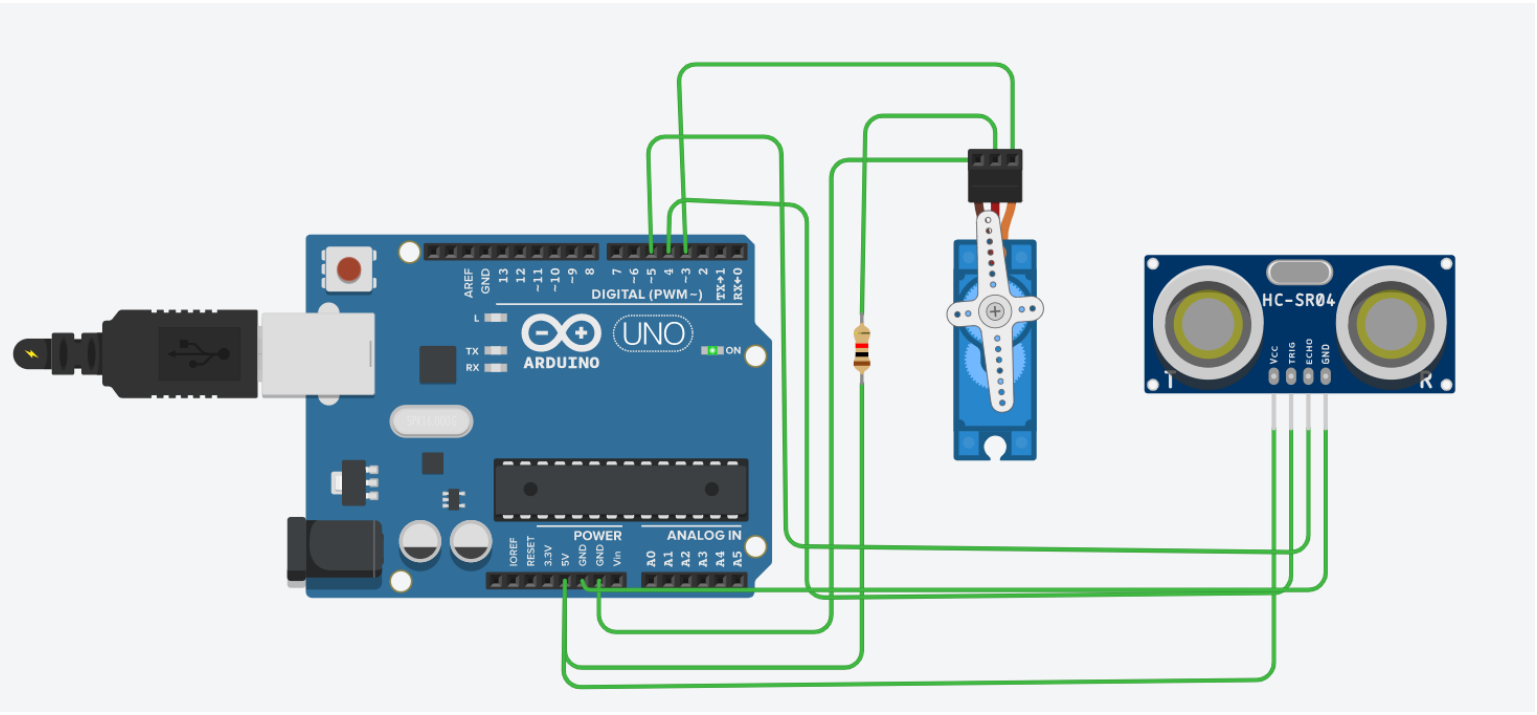
HC-SR04
Vcc
TRIG
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T
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DIGITAL (PWM~)
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ANALOG IN
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L