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ASSIGNMENT-2

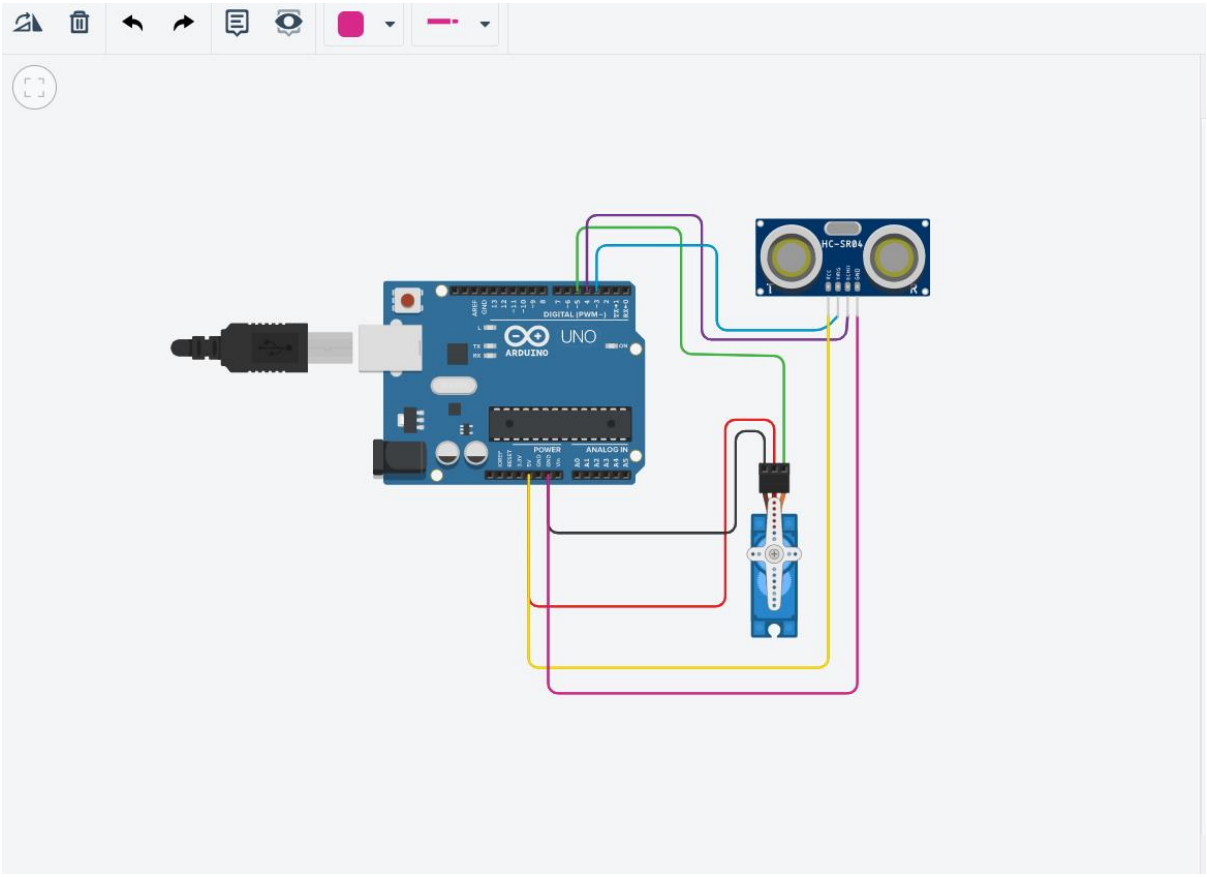
Automatic garage door opening system

Code:

```
#include<Servo.h>
Servo s;
void setup()
{
 pinMode(3, OUTPUT);
 pinMode(4, INPUT);
 Serial.begin(9600);
 s.attach(5);
}
void loop()
{
digitalWrite(3, LOW);
delayMicroseconds(2);
digitalWrite(3, HIGH);
delayMicroseconds(10);
digitalWrite(3, LOW);
```

```
 float duration = pulseIn(4, HIGH);
float distance= duration*0.034/2;
Serial.print("Distance: ");
Serial.println(distance);
  if (distance<25)
{
 for(int i=0;i<=180;i++)
{
 s.write(i);
 delay(50);
}
 delay(200);
 Serial.print("Vehicle has approached, Opening Gate!!");
 for(int j=180;j>=0;j--)
{
 s.write(j);
 delay(50);
}
 delay(200);
 }
}
```

Circuit:



Output: