#include<Servo.h>

Servo sai;

void setup()

{

pinMode(6, OUTPUT);

pinMode(9, INPUT);

sai.attach(7);

Serial.begin(9600);

}

void loop()

{

digitalWrite(6, HIGH);

delay(1000);

digitalWrite(6, LOW);

int t=pulseIn(9,HIGH);

int d=(t\*0.034)/2;

Serial.print("the distance is");

Serial.println(d);

delay(1000);

if(d>=100)

{

sai.write(180);

Serial.println("servo is at angle 180");

}

else

{

sai.write(0);

Serial.println("servo is at angle 0");

}

}