**Smart Home**

const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;  
const int buzz = 7;  
int pulseValue;  
float distance;  
  
void setup( ) {  
pinMode(echoPin, INPUT);  
pinMode(triggerPin, OUTPUT);  
pinMode(red, OUTPUT);  
pinMode(green, OUTPUT);  
pinMode(blue, OUTPUT);  
pinMode(buzz, OUTPUT);  
Serial.begin(9600);  
}  
  
void loop( )  
{  
   
digitalWrite(triggerPin, LOW);  
delayMicroseconds(5);  
digitalWrite(triggerPin, HIGH);  
delayMicroseconds(10);  
pulseValue=pulseIn(echoPin, HIGH);  
distance=(pulseValue\*0.0001657\*39.37);  
   
  
  
if (distance<=5)  
{  
  digitalWrite(red, HIGH);  
  digitalWrite(green, LOW);  
  digitalWrite(blue, LOW);  
  tone(buzz, 500);  
}  
   
else if (distance<=10)  
{  
  digitalWrite(green, HIGH);  
  digitalWrite(red, LOW);  
  digitalWrite(blue, LOW);  
  tone(buzz, 1000);  
}  
  
else  
{  
  digitalWrite(blue, HIGH);  
  digitalWrite(red, LOW);  
  digitalWrite(green, LOW);  
  tone(buzz, 1500);  
}  
   
Serial.print(distance);  
Serial.println(" inch/es");  
delay(500);  
}

