# CODE:

// C++ code

// #include<Servo.h> #define LED 13

#define FAN 10 #define TEMP A0 #define BUZZER 11

#define PIR 12

#define DOOR 5

#define TRIGGER 6

#define ECHO 7

#define TRIGGER1 9

#define ECHO1 8 Servo S;

void setup()

{

Serial.begin(9600); pinMode(LED,OUTPUT); pinMode(FAN,OUTPUT); pinMode(BUZZER,OUTPUT);

pinMode(PIR,INPUT); pinMode(DOOR,OUTPUT); pinMode(TRIGGER,OUTPUT); pinMode(ECHO,INPUT); pinMode(TRIGGER1,OUTPUT); pinMode(ECHO1,INPUT);

S.attach(DOOR); S.write(90);

}

void loop()

{

//Car Garage digitalWrite(TRIGGER,0); digitalWrite(TRIGGER,1); delayMicroseconds(10); digitalWrite(TRIGGER,0); float d = pulseIn(ECHO,1); float l = (d\*0.0343)/2;

int m = map(l,0,330,0,255);

if(m<=50)

{

tone(BUZZER,294,700);

delay(1000); noTone(BUZZER);

Serial.println("Buzzer horn when Car parked");

}

else

analogWrite(BUZZER,0);

//Door Open

int z = digitalRead(PIR); delay(1000);

if(z==1)

{

S.write(0); Serial.println("Door Opened"); delay(3000);

S.write(90); delay(1000);

}

else

{

S.write(90); delay(1000);

}

digitalWrite(TRIGGER1,0); digitalWrite(TRIGGER1,1); delayMicroseconds(10); digitalWrite(TRIGGER1,0); float d1 = pulseIn(ECHO1,1); float l1 = (d1\*0.0343)/2; if(l1<330)

{

//IN ROOM

Serial.println("Person in Room"); digitalWrite(LED,1);

double a = analogRead(TEMP); double t = (((a/1024)\*5)-0.5)\*100; int s = map(t,-40,120,0,255); if(s>100)

analogWrite(FAN,s); delay(2000);

}

else

{

digitalWrite(LED,0); analogWrite(FAN,0);

}

}

# OUTPUT:

