unsigned int Duty\_cycle;

int AMBULANCE\_SWITCH = 7;

int Pwm = 6;

char tag\_found[13];

char tags\_found[13];

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

pinMode(AMBULANCE\_SWITCH,INPUT);

pinMode(Pwm,OUTPUT);

Duty\_cycle = 0;

}

void loop() {

Duty\_cycle = 153;

analogWrite(Pwm,Duty\_cycle);

if(Serial.available() > 11)

{

char i = 0;

while(i < 12)

{

tag\_found[i] = Serial.read();

i++;

}

tag\_found[i] = '\0';

if(String(tag\_found) == "52003260D5D5")

{

Duty\_cycle = 102;

analogWrite(Pwm,Duty\_cycle);

delay(5000);

Duty\_cycle = 153;

analogWrite(Pwm,Duty\_cycle);

tag\_found[i] = '\0';

}

else if(String(tag\_found) == "520014E70FAE")

{

Duty\_cycle = 180;

analogWrite(Pwm,Duty\_cycle);

delay(5000);

Duty\_cycle = 153;

analogWrite(Pwm,Duty\_cycle);

tag\_found[i] = '\0';

}

else if(String(tag\_found) == "520036A29C5A")

{

Duty\_cycle = 255;

analogWrite(Pwm,Duty\_cycle);

delay(5000);

Duty\_cycle = 153;

analogWrite(Pwm,Duty\_cycle);

tag\_found[i] = '\0';

}

}

while(digitalRead(AMBULANCE\_SWITCH) == 1)

{

char i = 0;

Duty\_cycle = 153;

analogWrite(Pwm,Duty\_cycle);

tag\_found[i] = '0';

if(Serial.available() > 11)

{

char i = 0;

while(i < 12)

{

tags\_found[i] = Serial.read();

i++;

}

tags\_found[i] = '\0';

}

}

}