#include <SoftwareSerial.h>

SoftwareSerial mySerial(8, 9); // RX, TX

const int strt=2;

const int alc=3;

const int ls=4;

const int rly1=5;

const int rly2=6;

const int buzz=7;

char x=0;

void setup()

{

pinMode(strt,INPUT);

pinMode(alc,INPUT);

pinMode(ls,INPUT);

pinMode(rly1,OUTPUT);

pinMode(rly2,OUTPUT);

pinMode(buzz,OUTPUT);

Serial.begin(9600);

mySerial.begin(1200);

Serial.println("welcome \n");

digitalWrite(strt,HIGH);

digitalWrite(ls,HIGH);

digitalWrite(rly1,LOW);

digitalWrite(rly2,LOW);

digitalWrite(buzz,LOW);

delay(1000);

agn:

if(digitalRead(strt)==HIGH)

{

if(digitalRead(alc)==HIGH)

{

goto agn;

}

goto agn;

}

digitalWrite(rly1,HIGH);

digitalWrite(rly2,LOW);

digitalWrite(buzz,HIGH);

}

void loop()

{

home:

if(digitalRead(alc)==HIGH)

{

digitalWrite(rly1,LOW);

digitalWrite(rly2,LOW);

wait:

if(digitalRead(strt)==HIGH)

{

goto wait;

}

digitalWrite(rly1,HIGH);

digitalWrite(rly2,LOW);

goto home;

}

if(digitalRead(ls)==LOW)

{

digitalWrite(rly1,LOW);

digitalWrite(rly2,LOW);

Serial.println("ALERT PLEASE,ACCIDENT OCCURED TO VEH123\n");

goto wait;

}

chk:

if(mySerial.available()>0) // Send data only when you receive data:

{

x = mySerial.read(); //Read the incoming data and store it into variable data

if(x == 'Z')

{

digitalWrite(rly1,LOW);

digitalWrite(rly2,HIGH);

Serial.println("ALERT PLEASE,ZONE RESTRICTION BEGINS\n");

mySerial.end();

delay(1000);

mySerial.begin(1200);

goto home;

}

if(x == 'N')

{

digitalWrite(rly1,HIGH);

digitalWrite(rly2,LOW);

Serial.println("ALERT PLEASE,ZONE RESTRICTION ENDS\n");

mySerial.end();

delay(1000);

mySerial.begin(1200);

goto home;

}

if(x == 'H')

{

digitalWrite(buzz,LOW);

Serial.println("ALERT PLEASE,HORN RESTRICTION\n");

mySerial.end();

delay(1000);

mySerial.begin(1200);

goto chk;

}

}

}