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#include <LiquidCrystal.h>    //LCD library
#include <Servo.h>
#include<string.h>

char read_in[16]="#####"; //Initialized variable to
store recieved data
char password[17]="123456789E#####";
LiquidCrystal lcd(13, 12, 11, 10, 9, 8);    // tell the
RedBoard what pins are connected to the display
int buzzer_pin= 6;
Servo servo1;
Servo servo2;
bool stop_servo=false;

void setup() {
    // Begin the Serial at 9600 Baud
    Serial.begin(9600);
    lcd.begin(16, 2); //tell the lcd library that we are using a
display that is 16 characters wide and 2 characters high
    lcd.clear(); //clear the display
    lcd.setCursor(0,0);
    lcd.print("Password: "); //preliminary lcd display prints
    //sets up pin mode for vibration module
    pinMode(buzzer_pin,OUTPUT);
    //servo setup code
    servo1.attach(4);
    servo2.attach(5);
    servo1.write(90);
    servo2.write(0);
}

void loop() {
    lcd.setCursor(0,1); //set cursor to second row
    Serial.readBytes(read_in,16); //Read the serial data and
store in var
    //main password detector

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    lcd.print(read_in);//prints read in data, aka password
entered to screen
    if(read_in[0]=='T'){
        //tamper detection script
        tone(buzzer_pin,165,500);
    }
    //checks to see if data has been passed, if so checks to see
if password entered
    if (read_in[0]!='#'){
        //servo move to constrain user until correct password
        if(!stop_servo){
            servo1.write(0);
            servo2.write(90);
            stop_servo=true;
        }
        //check data for if password entered and correct
        String comp_read= String(read_in);
        String comp_pass= String(password);
        if(comp_read.equals(comp_pass)){
            lcd.setCursor(0,1);
            lcd.print("PASSWORD CORRECT");
            servo1.write(90);
            servo2.write(0);
            delay(1000);
        }else{
            stop_servo=false;
        }
    }
}
}

```