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#Raspberry Pi Libraries

import RPi.GPIO as GPIO #GPIO library

import time #library for sleep

import board

import digitalio

import adafruit_character_lcd.character_lcd as characterlcd

#set mode as BCM

GPIO.setmode(GPIO.BCM)

# Modify this if you have a different sized character LCD

lcd_columns = 16

lcd_rows = 2

# Raspberry Pi Pin Config:

lcd_rs = digitalio.DigitalInOut(board.D5)

lcd_en = digitalio.DigitalInOut(board.D6)

lcd_d4 = digitalio.DigitalInOut(board.D12)

lcd_d5 = digitalio.DigitalInOut(board.D13)

lcd_d6 = digitalio.DigitalInOut(board.D16)

lcd_d7 = digitalio.DigitalInOut(board.D17)

# Initialise the lcd class

lcd = characterlcd.Character_LCD_Mono(

    lcd_rs, lcd_en, lcd_d4, lcd_d5, lcd_d6, lcd_d7, lcd_columns, lcd_rows)

#set pins

IR_OUT = 21

BUZ = 22

#setup pins at output

GPIO.setup(IR_OUT, GPIO.IN)

GPIO.setup(BUZ, GPIO.OUT)

def destroy():

    GPIO.output (BUZ, GPIO.LOW)

    GPIO.cleanup()
```

```
if __name__ == '__main__':  
    try:  
        while True:  
            IR_State = GPIO.input(IR_OUT)  
            if (IR_State == True):  
                print ("OBJECT DETECTED")  
                lcd.clear()  
                lcd.message ="OBJECT DETECTED"  
                GPIO.output (BUZ, GPIO.HIGH)  
                time.sleep(0.5)  
                GPIO.output (BUZ, GPIO.LOW)  
  
            else:  
                lcd.clear()  
                lcd.message ="NO OBJECT"  
                time.sleep(0.5)  
                print ("NO OBJECT")  
  
    except KeyboardInterrupt:  
        destroy()
```