#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()