TEMPERATURE AND HUMIDITY CHECK

# WOKWI LINK:

<https://wokwi.com/projects/364590164676177921>

# PROGRAM :

import random import time from machine

import Pin, PWM, ADC TEMP\_THRESHOLD

= 30

HUMIDITY\_THRESHOLD = 70

BUZZER\_PIN = 5

BUZZER\_FREQ = 2000 BUZZER\_DUTY = 512 buzzer =

PWM(Pin(BUZZER\_PIN), freq=BUZZER\_FREQ, duty=0)

HUMIDITY\_PIN = 34 TEMPERATURE\_PIN

= 35 adc = ADC(Pin(HUMIDITY\_PIN))

adc.atten(ADC.ATTN\_11DB)

while True: temperature =

random.uniform(10, 45) humidity = adc.read()

/ 4095 \* 100 print("Temperature:

{:.2f} C, Humidity: {:.2f}

%".format(temperature, humidity))

if temperature > TEMP\_THRESHOLD or humidity >

HUMIDITY\_THRESHOLD: print("ALARM! Temperature or

Humidity is too high!")

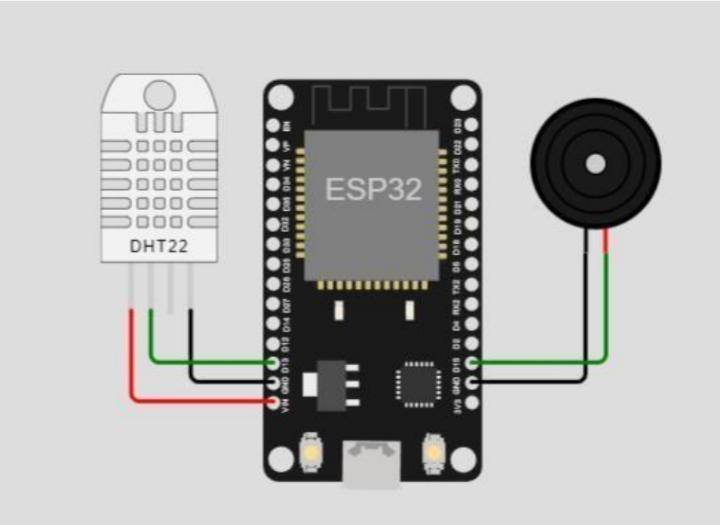
buzzer.duty(BUZZER\_DUTY)

time.sleep(0.5) buzzer.duty(0)

time.sleep(0.5)

time.sleep(1)

# Connection diagram :



# Output:

