```
import tm1637
from machine import Pin
from time import sleep
import dht

tm = tm1637.TM1637(clk=Pin(4), dio=Pin(5))
dht11_sensor = dht.DHT11(Pin(16))
green_led=Pin(14,Pin.OUT)
yellow_led=Pin(13,Pin.OUT)
red_led=Pin(12,Pin.OUT)
buzz=Pin(17,Pin.OUT)

while True:
    dht11_sensor.measure()
    temp=dht11_sensor.temperature()
    tm.temperature(temp)

    if temp <=30:
        green_led.on()
        yellow_led.off()
        red_led.off()
        buzz.off()
    if temp > 30 and temp <= 35:
        green_led.off()
        yellow_led.on()
        red_led.off()
        buzz.off()
    if temp >35:
        green_led.of()
        yellow_led.off()
        red_led.on()
        buzz.on()

    sleep(1)
```

Libraries required for this project

Setting up the Components

The Algorithm for this project

This is Ex 4.

Using the knowledge gained so far modify the simulation.py program to achieve the following:

Temp below or equal to 30 Deg C – display green led, turn off the other two
Temp above 30 but below 35 Deg C – display yellow led, turn off the other two
Temp above 35 Deg C – display red led, turn off the other two

Temperature Readings to be displayed on the 7 segment display

Additional Challenge: Add a buzzer on your own and sound buzzer for Temp above 35 Deg C