

ASSIGNMENT – 2

INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM

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PROGRAM:

```
import time
import Adafruit_DHT
from Adafruit_IO import Client, Feed

DHT_READ_TIMEOUT = 5

DHT_DATA_PIN = 26

ADAFRUIT_IO_KEY = 'YOUR_AIO_KEY'

ADAFRUIT_IO_USERNAME = 'YOUR_AIO_USERNAME'

aio = Client(ADAFRUIT_IO_USERNAME, ADAFRUIT_IO_KEY)

temperature_feed = aio.feeds('temperature')
humidity_feed = aio.feeds('humidity')

dht22_sensor = Adafruit_DHT.DHT22

while True:
    humidity, temperature = Adafruit_DHT.read_retry(dht22_sensor, DHT_DATA_PIN)
    if humidity is not None and temperature is not None:
        print('Temp={0:0.1f}*C Humidity={1:0.1f}%'.format(temperature, humidity))
        temperature = '%.2f'%(temperature)
        humidity = '%.2f'%(humidity)
        aio.send(temperature_feed.key, str(temperature))
        aio.send(humidity_feed.key, str(humidity))
    else:
```

```
print('Failed to get DHT22 Reading, trying again in ', DHT_READ_TIMEOUT, '  
seconds')  
time.sleep(DHT_READ_TIMEOUT)
```