IBM

ASSIGNMENT 2

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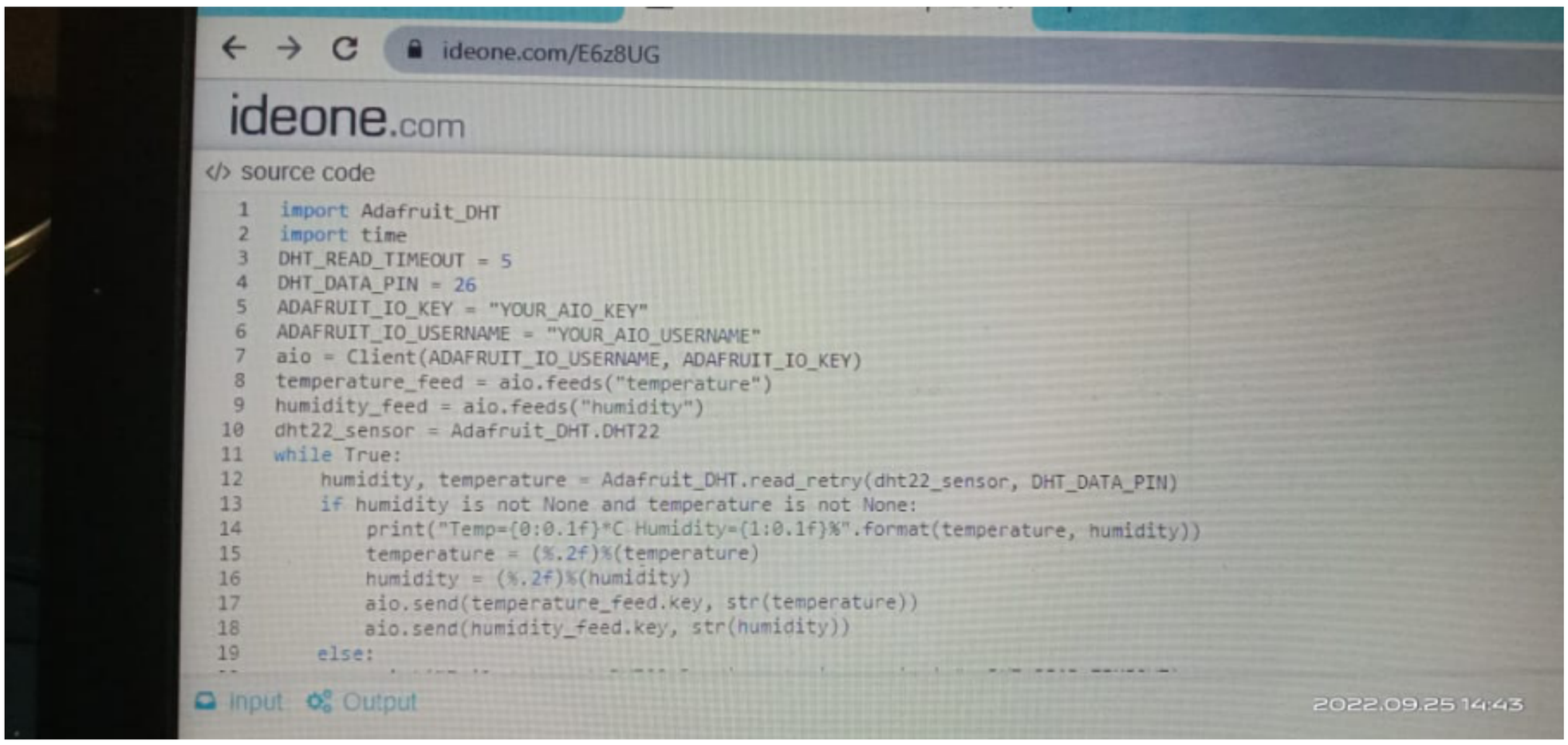
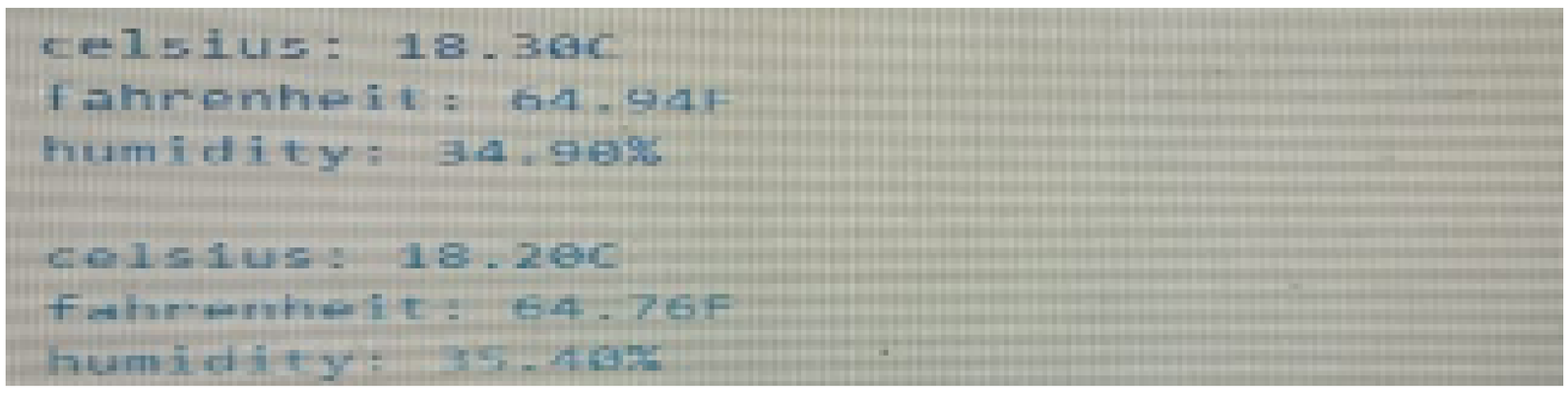
PYTHON CODE:

```
import time

import Adafruit_DHT

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:
```

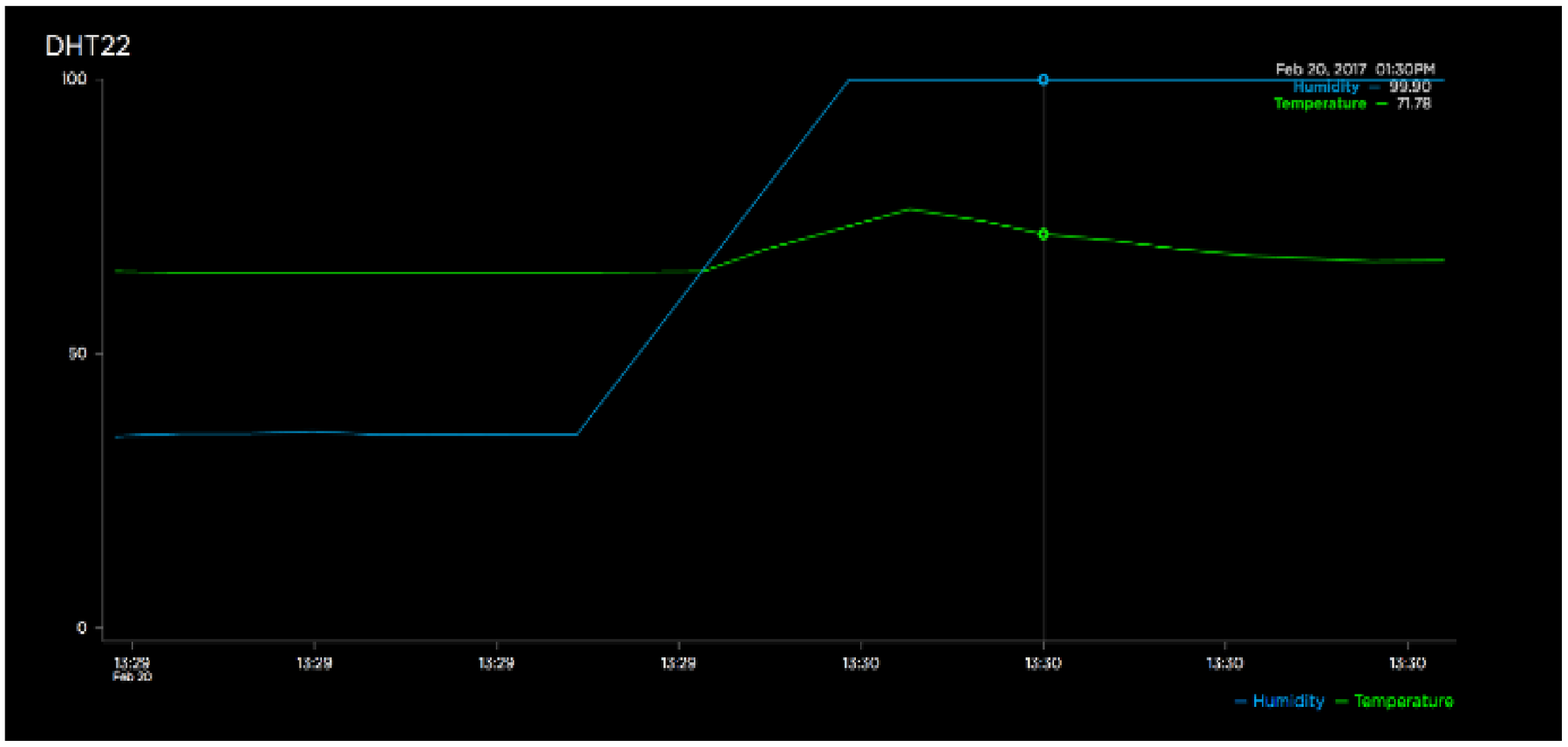
```
        print('Failed to get DHT22 Reading, trying again in', DHT_READ_TIMEOUT, 'seconds')
    time.sleep(DHT_READ_TIMEOUT)
```

OUTPUT:





Line chart update from ADAFRUIT IO:



USING PYTHON without adafruit

CODE:

```
import random
While(True):
    a = random.randint(10,99)
    b = random.randint(10,99)
    if(a>35 and b<60)
        print(“ High temperature and humidity of:” a,b,” %” ,alarm is on)
   elif(a<35 and b>60)
        print(“ Normal temperature and humidity of:” a,b,” %” ,alarm is
off)
  break
```

OUTPUT:

raw.githubusercontent.com/IBM-EPBL/IBM-Project-49483-1660820029/main/Assignment/Lakshya%20P%20(Team%20Lead)/Assignment%202/Online%20Python%20Co...

Online Python Compiler (Interpr

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Interactive Python Course

main.py

Run

Shell

Clear

```
1  import random
2  while(True):
3      a=random.randint(10,99)
4      b=random.randint(10,99)
5      if(a>35 and b<60):
6          print("high temperature and humidity of:",a,b,"%","alrm is on")
7      elif(a<35 and b>60):
8          print("Normal temperature and humdity of:",a,b,"%","alarm is
               off")
9          break
```

```
high temperature and humidity of: 60 25 % alrm is on
high temperature and humidity of: 95 45 % alrm is on
high temperature and humidity of: 56 11 % alrm is on
high temperature and humidity of: 84 28 % alrm is on
high temperature and humidity of: 96 50 % alrm is on
high temperature and humidity of: 82 34 % alrm is on
Normal temperature and humdity of: 26 69 % alarm is off
>
```

Type here to search

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