

Lab Record

OUTPUT

Terminal connecting to HC-05

Connected

Waiting For command
send 1 to turn on send 0 to turn off

1
LED On!

0

LED off!

Serial monitor

Serial Port	Newline	9600
COM3		

LED On!

LED off!

Serial monitor													
Firmware version: 0X9 = v20													
Scan PICC to see. VID, SAK, type & data blocks													
Card VID: 6CC 08 88 1A													
Card SAK: 08													
PICC-type: MIFARE 1KB													
Sector	Block 0	1	2	3	4	5	6	7	8	9	10	11	12
15	63 00	00 00 00 00 00 00 00 00 00 00 00 00 00											
0	0 0	61 08 88 17	68 89 82 84	65 66 67 68	69								

Access Bits

(001)
!(000)
!(000)
!(000)

OUTPUT

Read → Output

After reading the card

** Card Detected **
 Card VID: SC 22 DA CC
 Card SAK: 08
 PIC type: MIFARE 1KB
 Authentication Failed
 Reading Failed

Writing data on a MIFARE PICC then reading the data

** Card Detected **
 Card VID: SC 22 DA CC
 Card SAK: 08
 PICC type: MIFARE 1KB
 Name: Shailesh
 *End reading

Write

Write personal data on MIFARE PICC
Card UID: 5C 22 PA CC PIC type: MIFARE 1KB

Type First name, ending with #
PCD_Authenticate() success:

MIFARE_Write() success:

MIFARE_Write() success (Arduino #)

Type first name ending with #

MIFARE_Write() success:

MIFARE_Write() success: (Shailu#)

OUTPUT

✓ ④ 3

Output Serial Monitor

connected

9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°C 74.12°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

9:32:11:369 → Humidity: 74.00 %, Temperature: 23.40°C
 74.12°F Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°C 74.11°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

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 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

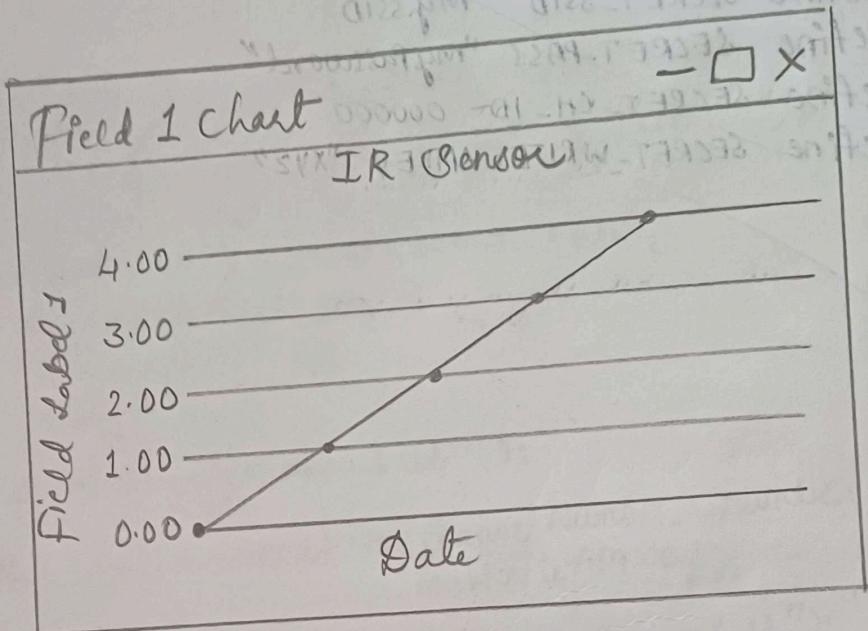
9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°C 74.11°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

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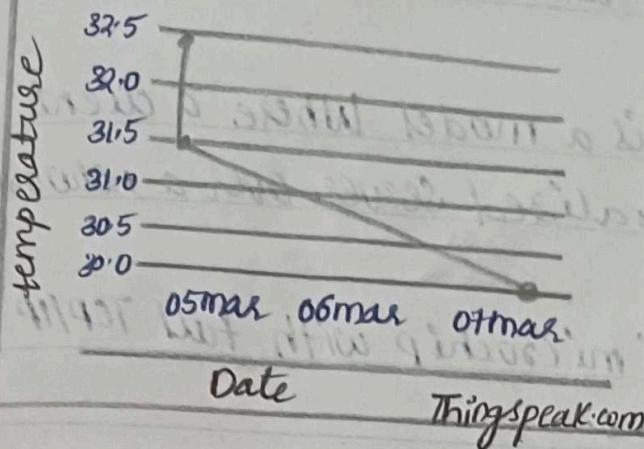
9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°C 74.11°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

9:32:11:365 → Humidity: 74.00 %, Temperature: 23.40°C 74.11°F
 Heat index: 23.73°C 74.71°F Humidity: 73.00 %.

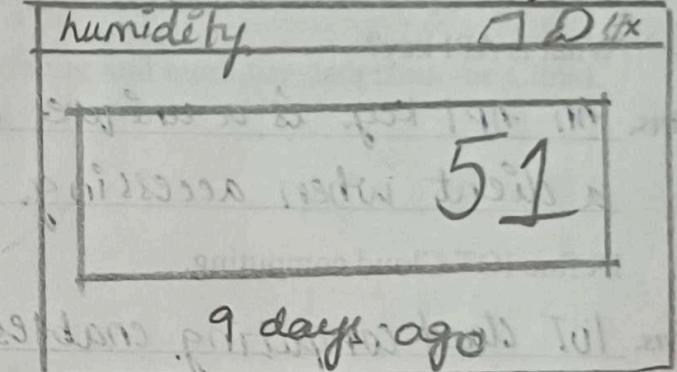
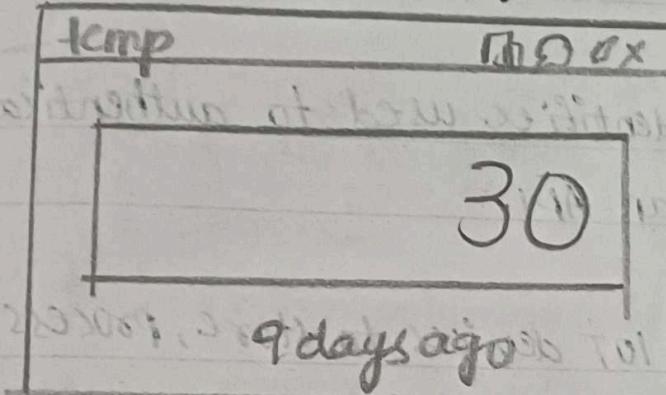
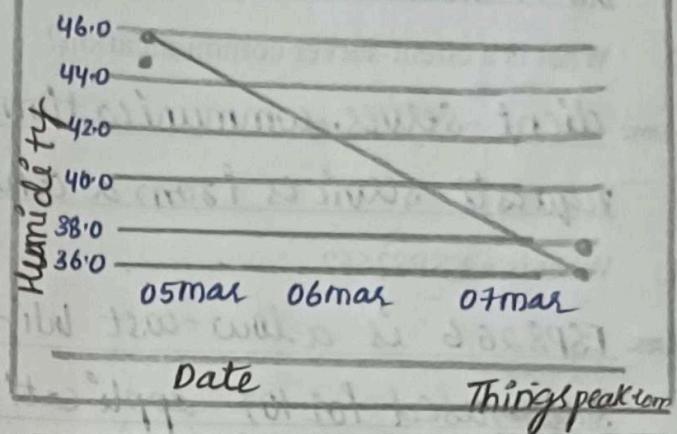


Thingspeak :-

Fieldchart



Fieldchart



Serial monitor

WiFi connected

Waiting --

Temperature : 27.50 degree celsius , Humidity : 49.00% ,
Send to Thingspeak .

Temperature : 27.50 degree celsius , Humidity : 48.00% ,
Send to Thingspeak .

Temperature : 32.90 degree celsius , Humidity : 41.00%
Send to Thingspeak .

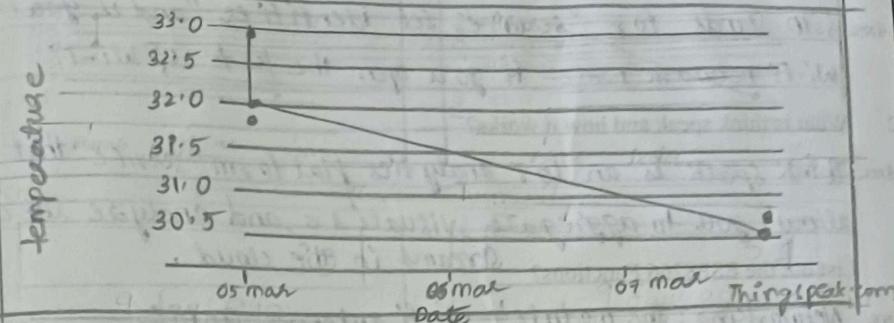
Temperature : 32.90 degree celsius , Humidity : 41.00%
Send to Thingspeak .

Temperature : 32.90 degree celsius , Humidity : 41.00%
Send to Thingspeak .

OUTPUT

Thingspeak :-

Fieldchart



Serial Monitor :-

Temperature : 29

Humidity : 36

Temperature : 30

Humidity : 37

Temperature : 29

Humidity : 36

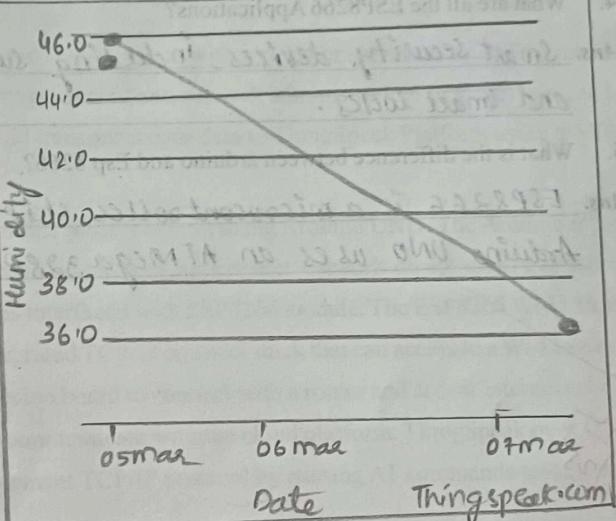
Temperature : 30

Humidity : 37

Temperature : 30

Humidity : 37

Field 2 chart



```

if (client) {
    while (client.connected()) {
        while (client.available() > 0) {
            float t = dht.readTemperature();
            float h = dht.readHumidity();
            client.print("humidity: ");
            client.print("temperature: ");
            client.println(h);
            Serial.println(h);
            client.println(t);
            Serial.println(t);
            delay(2000);
        }
    }
    client.stop();
    Serial.println("Client disconnected");
}

```

Output:-
 esptool.py v3.0
 Serial Port (COM2)
 Connecting ---.
 chip at ESP8266EX
 Features: WiFi
 Crystal is 26MHz
 MAC: 08:fa:e0:6b:c8:35
 Uploading stub ---.
 Running stub ---.
 Stub running --.
 Configuring flash size: 4MB

compressed 283184 bytes to 207811 --

Waiting at 0x0000000 -- (7%)

Waiting at 0x000400 -- (15%)

Waiting at 0x000c00 -- (23%)

Waiting at 0x000100 -- (30%)

Waiting at 0x000400 -- (53%)

Waiting at 0x0002400 -- (69%)

Waiting at 0x0002800 -- (76%)

Waiting at 0x0002c00 -- (92%)

Waiting at 0x003000 -- (100%)

wrote 283184 bytes (207811 compressed) at

0x0000000 in 16.0 seconds -

Hash of data verified

leaving --

Hard resetting via RTS Pin --

Serial Monitor

Connecting --

Connecting -- WiFi IP: 192.168.65.73

Connected to WiFi IP: 192.168.65.73

11:39:52.585 → 32.00

11:39:52.624 → 31.90

11:39:54.638 → 32.00

11:39:54.640 → 31.80

11:39:56.675 → 32.00

11:39:58.691 → 32.00

~~11:40:00.694 → 32.00~~

11:40:00.736 → 31.90

11:40:02.740 → 32.00

11:40:04.749 → 31.70

TCP Client :-

Lab Rec

IP address or domain
192.168.65.73

Port
8080

Disconnect

Received

humidity ; temperature ; 32.00
31.90
humidity ; temperature ; 31.00
31.70
humidity ; temperature ; 32.00
31.70
humidity ; temperature ; 31.00
31.90
humidity ; temperature ; 32.00
31.70
humidity ; temperature ; 31.90
30.70
humidity ; temperature ; 32.00
31.70
humidity ; temperature ; 31.00
31.90
humidity ; temperature ; 32.00
31.90
humidity ; temperature ; 31.00
30.90

clear.

Hem Autoscroll

hello

Add CRLF

Send message

```

    udp.print(humidity);
    udp.println("1.");
    udp.endPacket();
    Serial.println("Data sent over UDP.");
  }
}

```

Output

Serial monitor

Temperature : -0.80°C Humidity : 7.10%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.20%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.30%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.40%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.50%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.60%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.70%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.80%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 7.90%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 8.00%.

Sending data over UDP ...

Data sent over UDP.

Temperature : -0.80°C Humidity : 8.10%.

Sending data over UDP ...

Data sent over UDP.

V 0.1

serial port com19
 connecting ...
 compressed 297776 bytes to 204259 bytes
 writing at 0x00000000 ... (7%)
 writing at 0x00000000 ... (30%)
 writing at 0x00000000 ... (61%)
 writing at 0x00000000 ... (84%)
 writing at 0x00000000 ... (92%)
 writing at 0x00000000 ... (100%)
 leaving ...

$\leftarrow \rightarrow RX = 192.16.113.27:8081$
 $TX = 192.168.0.7:8081$

Get more great apps for Phone
 RX:0B, TX:0B

more free
apps

Temperature: 20.80°C Humidity: 7.10%
 sending data over UDP
 Data sent over UDP
 Temperature: 20.80°C Humidity: 7.20%
 sending data over UDP
 Data sent over UDP
 Temperature: 20.80°C Humidity: 7.30%
 sending data over UDP
 Data sent over UDP
 Temperature: 20.80°C Humidity: 7.40%
 sending data over UDP
 Data sent over UDP
 Temperature: 20.80°C Humidity: 7.50%
 sending data over UDP
 Data sent over UDP
 Temperature: 20.80°C Humidity: 7.60%
 sending data over UDP
 Data sent over UDP

Type command + In >