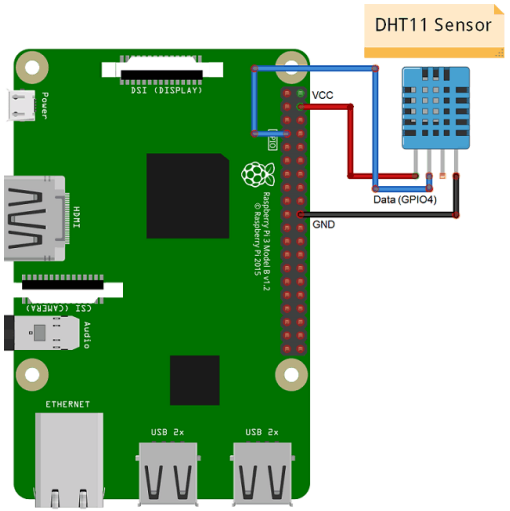
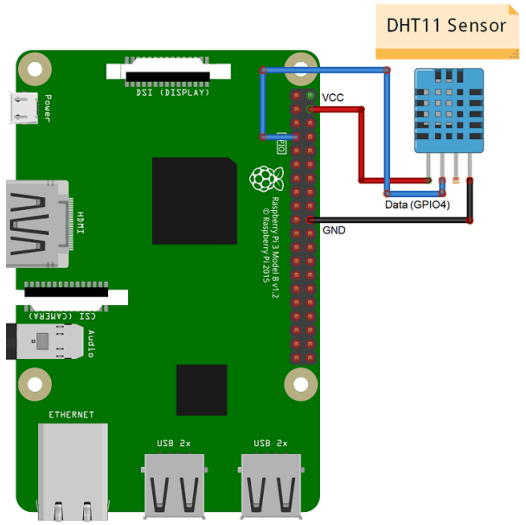
DHT11 Program




```
import Adafruit_DHT
import time
# By default Adafruit_DHT uses BCM Pins
DHT_SENSOR = Adafruit_DHT.DHT11
DHT_PIN = 4
while True:
    humidity, temperature = Adafruit_DHT.read_retry(DHT_SENSOR, DHT_PIN)
    if humidity is not None and temperature is not None:
        print("Temperature={0:0.1f}*C Humidity={1:0.1f}%".format(temperature, humidity))
    else:
        print("Sensor failure. Check wiring.")
    time.sleep(2)
```

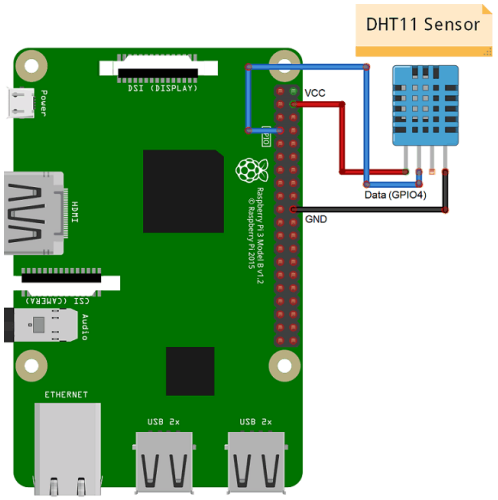
DHT11 Program with 16x2 LCD

```
# 16x2 LCD has a I2C module
import Adafruit_DHT
import time
from rpi_lcd import LCD
lcd = LCD()
DHT_SENSOR = Adafruit_DHT.DHT11
DHT_PIN = 4
while True:
    humidity, temperature = Adafruit_DHT.read_retry(DHT_SENSOR, DHT_PIN)
    if humidity is not None and temperature is not None:
        print("Temperature={0:0.1f}*C Humidity={1:0.1f}%".format(temperature, humidity))
        lcd.text("Temp     : {0:0.1f}C".format(temperature), 1)
        lcd.text("Humidity : {0:0.1f}%".format(humidity), 2)
    else:
        print("Sensor failure. Check wiring.")
    time.sleep(2)
```



Raspberry Pi	I2C LCD Module
5V	VCC
GND	GND
Pin 3 (GPIO 2)	SDA
Pin 5 (GPIO 3)	SLC

DHT11 Program to send data to ThingSpeak Cloud




```
import thingspeak
import Adafruit_DHT
import time
channel_id = 1760281 # put here the ID of the channel you created
write_key = 'YZAXGJE5A8TBWCX5' # update the "WRITE KEY"
channel = thingspeak.Channel(id=channel_id, api_key=write_key)
DHT_SENSOR = Adafruit_DHT.DHT11
DHT_PIN = 4
while True:
    humidity, temperature = Adafruit_DHT.read_retry(DHT_SENSOR, DHT_PIN)
    if humidity is not None and temperature is not None:
        print("Temperature={0:0.1f}*C Humidity={1:0.1f}%".format(temperature, humidity))
        # update the value in the thingspeak cloud
        response = channel.update({'field1': temperature, 'field2': humidity})
    else:
        print("Sensor failure. Check wiring.")
    time.sleep(2)
```

DHT11 Program to receive data to ThingSpeak Cloud

```
import urllib3
READ_API_KEY='0Z2FQUXLWTOCY5N2'# write you thinkspeak read API key
CHANNEL_ID=1760281
http = urllib3.PoolManager()
r1 = http.request('GET','https://api.thingspeak.com/channels/1760281/fields/1.json?results=2')
print(r1.data)
r2 = http.request('GET','https://api.thingspeak.com/channels/1760281/fields/2.json?results=2')
print(r2.data)
```