

# IoT – Assignment – 4 (DHT11)

## Code

```
import RPi.GPIO as GPIO
import dht11
import time

# initialize GPIO
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BCM)
GPIO.cleanup()

try:
    while True:
        # read data using pin 16
        instance = dht11.DHT11(pin = 16)
        result = instance.read()

        if result.is_valid():
            print("Temperature: %-3.1f C" % result.temperature)
            print("Humidity: %-3.1f %%" % result.humidity)
        else:
            print("Error: %d" % result.error_code)
        time.sleep(3)

except KeyboardInterrupt:
    print("Program stopped by user.")
    GPIO.cleanup()
```

# Output

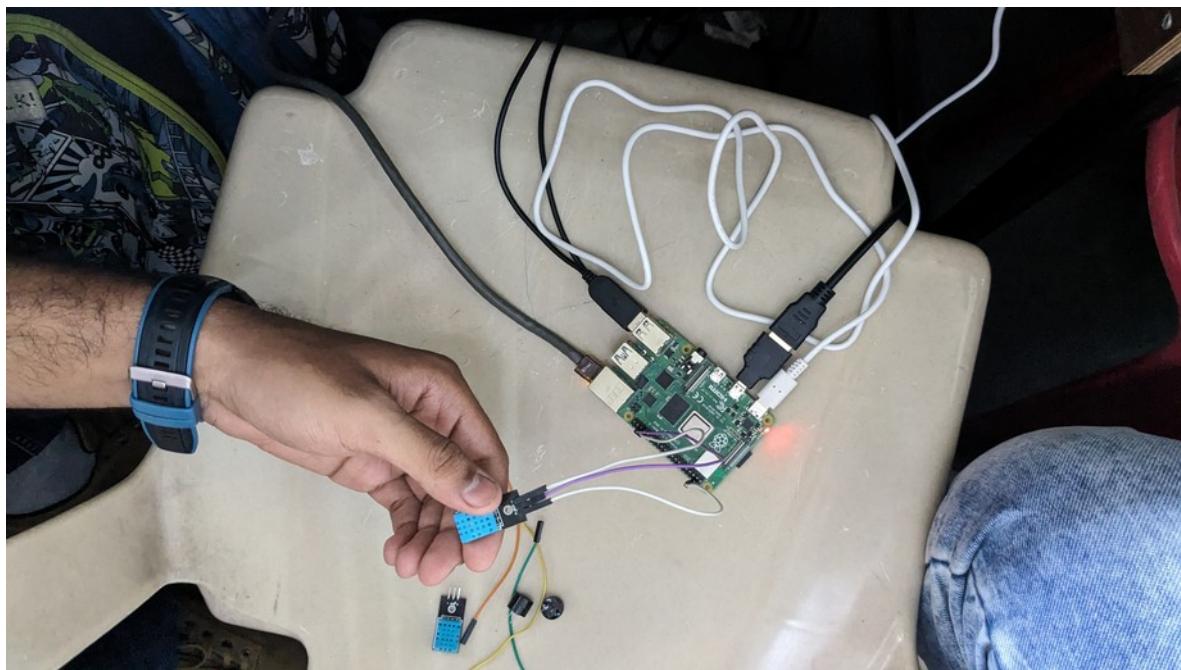


Figure 1: Top view (connections)

A screenshot of a terminal window on a Raspberry Pi. The window title is "raspberrypi@raspberrypi: ~/Desktop/dht11-sensor". The code in the terminal is a Python script for reading DHT11 sensor data. The output shows the script running and printing the temperature and humidity values. The terminal also shows the command "python dht11-sensor.py" being run.

Figure 2: Display output (code)

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