**Experiment no 9: Write a program to create TCP Server on cloud using Arduino and Respond with humidity data to TCP Client when requested.**

**Pin connection** : DHT11 sensor

GND-GND

DATA PIN-D4

VCC-Vin

**Source code:**

#include "ESP8266WiFi.h"

#include "DHT.h"

#define DHTTYPE DHT11

const char\* ssid = "Redmi Note 11 Pro+ 5G";

const char\* password = "mani@123";

WiFiServer wifiServer(9000);

DHT dht(D4, DHT11);

void setup() {

Serial.begin(115200);

delay(1000);

WiFi.begin(ssid, password);

while (WiFi.status() != WL\_CONNECTED) {

delay(1000);

Serial.println("Connecting..");

}

Serial.print("Connected to WiFi. IP:");

Serial.println(WiFi.localIP());

wifiServer.begin();

dht.begin();

}

void loop() {

WiFiClient client = wifiServer.available();

if (client) {

while (client.connected()) {

while (client.available()>0) {

int h = dht.readHumidity();

client.print("humidity :");

client.println(h);

//Serial.println(sensor\_value);

delay(2000);

}

}

client.stop();

Serial.println("Client disconnected");

}

}