ALGORITHM:  
The code you provided is a Python program for reading temperature and humidity data from a DHT22 sensor. While it's not a complex algorithm, here's a high-level algorithmic description of what the program does:   
  
1. \*\*Import the Required Library\*\*:  
   - Import the `Adafruit\_DHT` library to interface with the DHT22 sensor. This library provides functions for reading data from the sensor.   
  
2. \*\*Set Sensor Type and GPIO Pin\*\*:  
   - Set the sensor type to DHT22 and specify the GPIO pin to which the sensor is connected. You can change the pin number as needed.   
  
3. \*\*Continuous Monitoring Loop\*\*:  
   - Enter a continuous loop to repeatedly read and display the sensor data.   
  
4. \*\*Read Data from Sensor\*\*:  
   - Attempt to read humidity and temperature data from the DHT22 sensor using `Adafruit\_DHT.read\_retry(sensor, pin)`.   
  
5. \*\*Check Data Validity\*\*:  
   - Verify that the data has been successfully read (i.e., `humidity` and `temperature` are not None). If data is valid, proceed to the next step. Otherwise, print an error message.   
  
6. \*\*Display Data\*\*:  
   - Print the temperature and humidity values to the console with two decimal places, along with their units (°C for temperature and % for humidity).   
  
7. \*\*Loop Continues\*\*:  
   - The loop continues to read and display sensor data until it is manually stopped by the user using a keyboard interrupt (typically Ctrl+C).   
  
PROGRAM:  
import Adafruit\_DHT  # Library for DHT22 sensor (you may need to install this)   
  
# Set the sensor type and GPIO pin (change as needed)  
sensor = Adafruit\_DHT.DHT22  
pin = 4   
  
while True:  
    try:  
        humidity, temperature = Adafruit\_DHT.read\_retry(sensor, pin)   
  
        if humidity is not None and temperature is not None:  
            print(f'Temperature: {temperature:.2f} °C')  
            print(f'Humidity: {humidity:.2f} %')  
              
            # Here, you can add code to send the data to a database or a cloud service   
  
        else:  
            print('Failed to retrieve data. Check the sensor and wiring.')   
  
    except KeyboardInterrupt:  
        print('Monitoring stopped by the user')  
        break   
  
OUTPUT:  
Temperature: 24.50 °C  
Humidity: 45.00 %