Source code //https://www.instructables.com/ESP32-Based-IoT-Weather-Station/

```
#define BLYNK_PRINT Serial
#define BLYNK_TEMPLATE_ID "TMPL36py2yjZg"
#define BLYNK_TEMPLATE_NAME "Weather Station"
#define BLYNK_AUTH_TOKEN "zxpc0mH3eXTCOqJvqhn6GZo8d1qaUPbM"
#include <WiFi.h> // importing all the required libraries
#include <WiFiClient.h>
#include <BlynkSimpleEsp32.h>
#include "Arduino.h"
#include "DHT.h"
#include "BMP085.h"
#include <Wire.h>

float temperature; // parameters
float humidity;
float pressure;
float mbar;

BMP085 myBarometer; // initialise pressure sensor

char auth[] = "zxpc0mH3eXTCOqJvqhn6GZo8d1qaUPbM"; // replace this with your auth token
char ssid[] = "Redmi"; // replace this with your wifi name (SSID)
char pass[] = "swapnali7"; // replace this with your wifi password

#define DHTPIN 5 // dht sensor is connected to D5
#define DHTTYPE DHT11     // DHT 11

DHT dht(DHTPIN, DHTTYPE); // initialise dht sensor
BlynkTimer timer;

void sendSensor() // function to read sensor values and send them to Blynk
{
```

```
  humidity = dht.readHumidity();
  temperature = dht.readTemperature();
  if (isnan(humidity) || isnan(temperature))
  {
    Serial.println("Failed to read from DHT sensor!");
    return;
  }

  pressure = myBarometer.bmp085GetPressure(myBarometer.bmp085ReadUP()); // read
pressure value in pascals
  mbar = pressure / 100; // convert millibar to pascals

  Blynk.virtualWrite(V0, temperature); // send all the values to their respective virtual pins
  Blynk.virtualWrite(V1, humidity);
  Blynk.virtualWrite(V2, mbar);
}

void setup()
{
  Serial.begin(115200);
  myBarometer.init();// sensor address  0x77
  dht.begin();
  delay(1000);
  Blynk.begin(auth, ssid, pass);
  delay(1000);
  timer.setInterval(1000L, sendSensor); // sendSensor function will run every 1000 milliseconds
}

void loop()
{
  Blynk.run();
  timer.run();
}
```