# CODE

```
#define BLYNK_PRINT Serial
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
#define BLYNK_TEMPLATE_ID "TMPL3-ueew2F8"
#define BLYNK_TEMPLATE_NAME "Obstacle Detection"
#define BLYNK_AUTH_TOKEN "hbmUCri3S4-vVwwTmNrQc_RClliPrFeD"
// Your WiFi credentials.
// Set password to "" for open networks.S
char auth[] = "hbmUCri3S4-vVwwTmNrQc_RClliPrFeD";
char ssid[] = "KIЯΛ";
char pass[] = "520 1314";
#define echoPin D6
#define trigPin D5
long duration;
int distance;
void ultrasonic()
{
   digitalWrite(trigPin, LOW);
   delayMicroseconds(2);
   digitalWrite(trigPin, HIGH);
   delayMicroseconds(10);
   digitalWrite(trigPin, LOW);
   duration = pulseIn(echoPin, HIGH); //read high pulse and store
```

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    distance = duration * 0.034 / 2; //formula to calculate the distance for ultrasonic sensor
    Serial.print("Distance: ");
    Serial.println(distance);
    Blynk.virtualWrite(V0, distance);
    delay(500);
}
void setup()
{
  Serial.begin(9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  Blynk.begin(auth,ssid,pass);
  delay(2000);
}

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