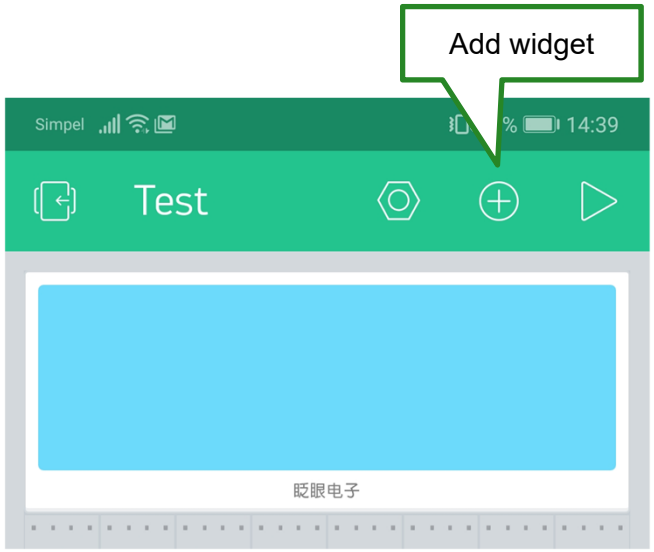
BLYNK APP: ADD DISPLAY

Step 1/5

Learn more: docs.blynk.cc/#widgets-displays-lcd

- Getting-started tutorial (use Blynk via USB cable)

- Get Blynk App (search Play Store)
- Start project (device: Arduino Nano, connection type USB)
- Add a display



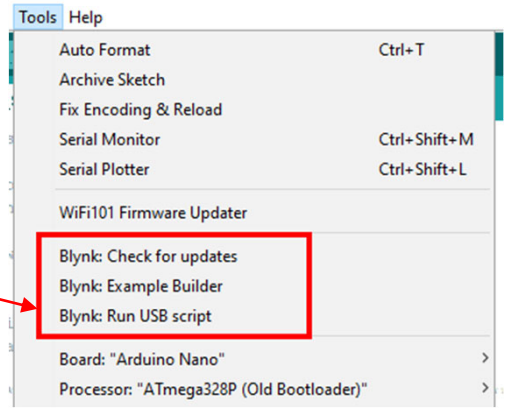
BLYNK: USB CONNECTION

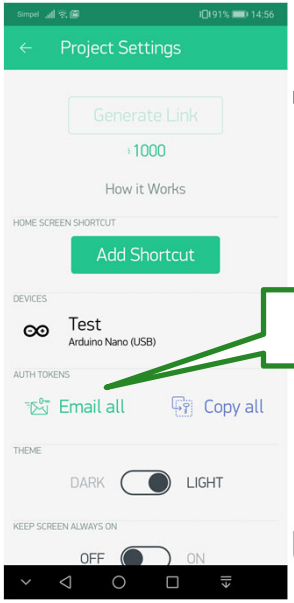
(NO WIFI)

Step 2/5

- Start with *File* > *Examples* > *Blynk* > *Boards_USB_Serial* > *Arduino_Serial_USB*
- Check Blynk-entries in tools menu: if not there, copy Arduino\tools folder from AppDev zip-file to Documents\Arduino and restart Arduino IDE
- Fill in Auth Token:

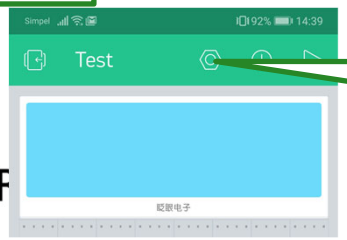
Save As …






```
34 #include <BlynkSimpleStream.h>
35
36 // You should get Auth Token in the Blynk App.
37 // Go to the Project Settings (nut icon).
38 char auth[] = "cbcbd4b13f8d4135a930a91f0881d7be";
```

Get Auth Token



Go to project settings

BLYNK: PRINT TO DISPLAY

CONNECTION VIA USB

Step 3/5

Learn more: docs.blynk.cc/#widgets-displays-lcd

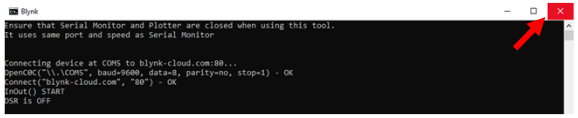
- Add code to sketch for Blynk LCD widget:

at top:

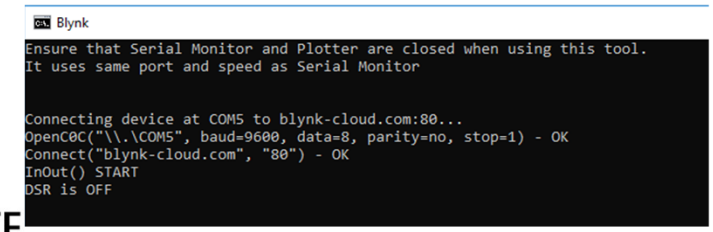
```
WidgetLCD lcd(V1); // this is a dislay widget in the Blynk Userinterface
```

at end of setup():

```
lcd.clear(); // clear the display in the Blynk App
lcd.print(0,0, "Hello Blynk");
```



- Close Blynk tool
- Upload sketch
- Run *Tools > Blynk: Run USB script:*

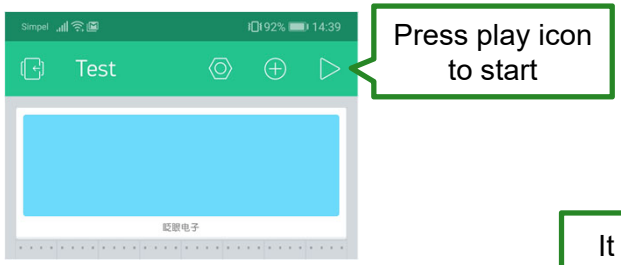


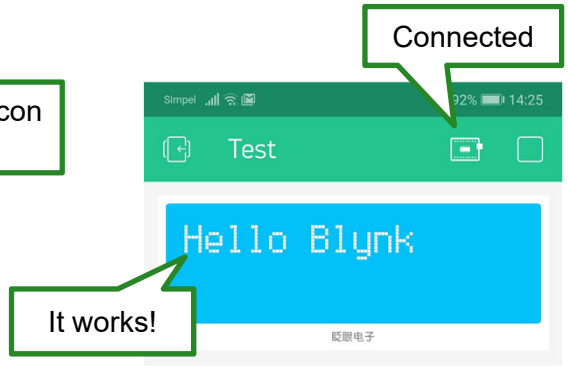
BLYNK: USB CONNECTION

(NO WIFI)

Step 4/5

- Start App





BLYNK: ADD SENSOR CODE

CONNECTION VIA USB

Step 5/5

Learn more: docs.blynk.cc/#widgets-displays-lcd

- Use code from example "DHT_Unified_Sensor"

at top:

```
#include <Adafruit_Sensor.h>
#include <DHT.h>
#include <DHT_U.h>

#define DHTPIN 2 // Pin which is connected to the DHT sensor
#define DHTTYPE DHT11

DHT_Unified dht(DHTPIN, DHTTYPE);
```

in setup():*

```
// Initialize sensor
dht.begin();
```

* Remove "Hello Blynk" print-statement from `setup()`

in loop(): after `Blynk.run();` add:

```
// Get temperature event and print its value
sensors_event_t event;
dht.temperature().getEvent(&event);
if (isnan(event.temperature)) {
  Serial.println("Error reading temperature!");
}
else {
  lcd.print(0,0,"Temp.: ");
  lcd.print(10,0,event.temperature);
}
delay(5000); // delay 5 seconds
```

… repeat for humidity

Run sketch:
- Close Blynk USB Script window
- Upload sketch
- Run *Tools > Blynk: Run USB script*
- Check Blynk App

Display temperature as a nice labeled value?

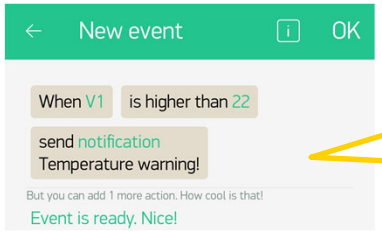
BLYNK: WARNING

USE EVENTOR AND NOTIFICATION WIDGET

- Add Eventor and Notification widget,
- Configure Eventor:

Learn more:
docs.blynk.cc/#widgets-other-eventor
docs.blynk.cc/#widgets-notifications-push-notifications

Eventor



Drawback: generates lots of events… might be better to do via code, and add a limit

- Add code:

```
// send temperature to Virtual Pin 1 in the App,
// to be able to process it in the Eventor:
Blynk.virtualWrite(V1, event.temperature);
```

Alternative: send notification from code in Arduino sketch:

```
if (event.temperature>24) Blynk.notify("Temperature warning");
```