15 - Temperature and Humidity Sensor with 7 Segment Display

Use our Programming 101 kit to display the temperature and humidity on a 7 segment display.

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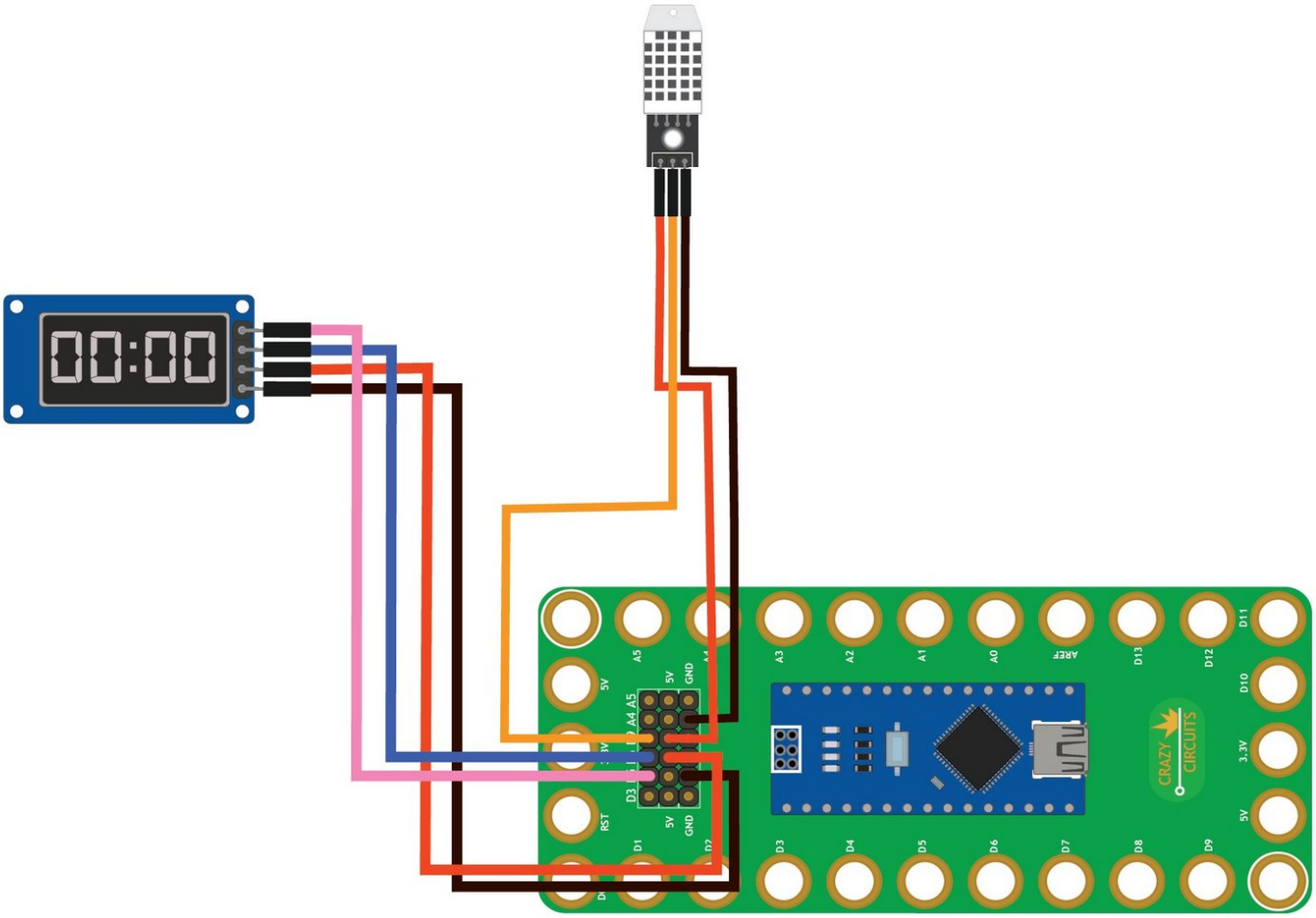


INTRODUCTION

Use our Robotics Board to display the temperature and humidity on a 7 segment display.

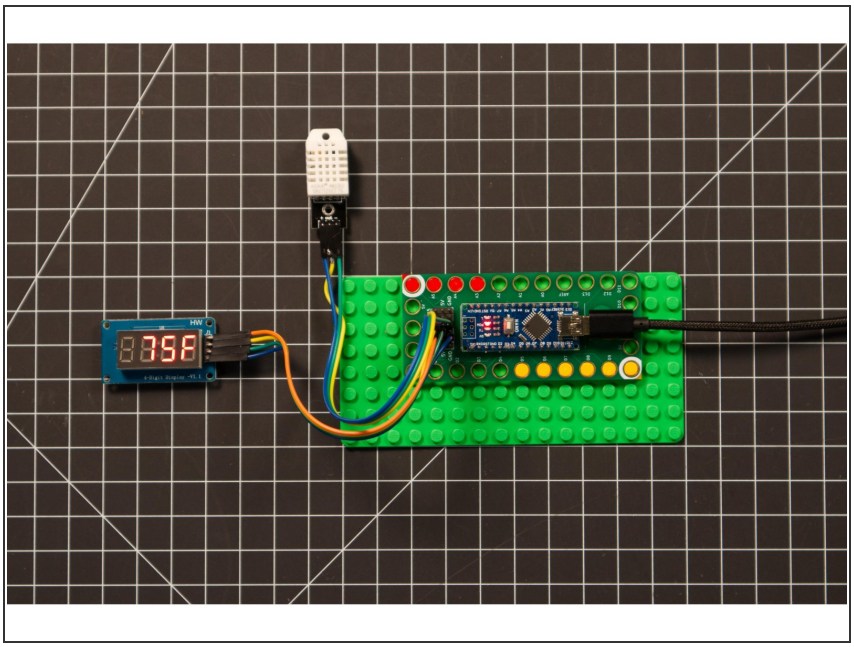
TOOLS:

- Scissors (1)
- Computer (1)

PARTS:

- Crazy Circuits Robotics Board (1)
- 7 Segment Display (1)
- Temperature and Humidity Sensor (1)
- Jumper Wires (7)

Step 1 — Build the Circuit

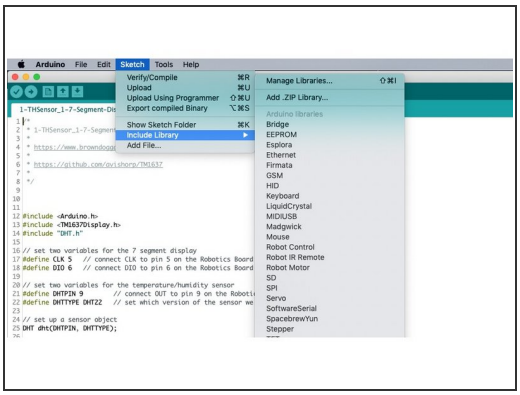


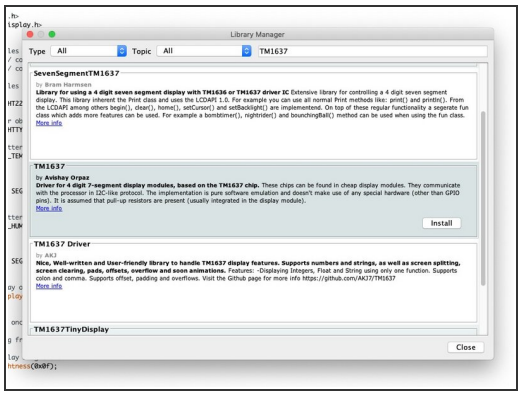
- Build the circuit as shown in the diagram using the components specified.

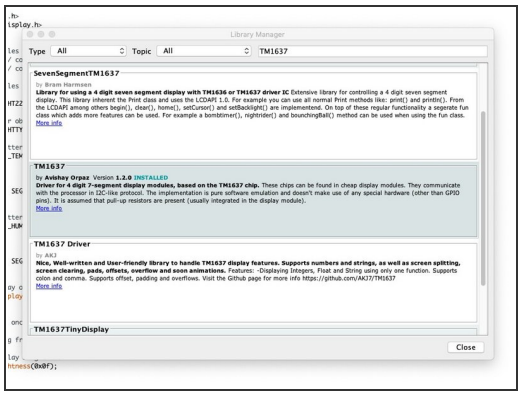
ⓘ You can use any color jumper wires for the 7 segment display, just make sure they are plugged into the right place.

ⓘ You can use any color jumper wires for the temperature and humidity sensor, just make sure they are plugged into the right place.

Step 2 — Install TM1637 library

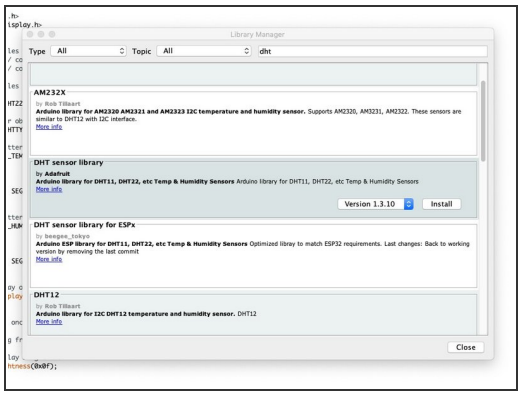
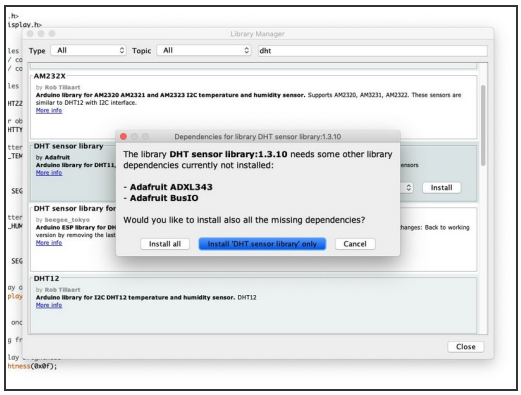
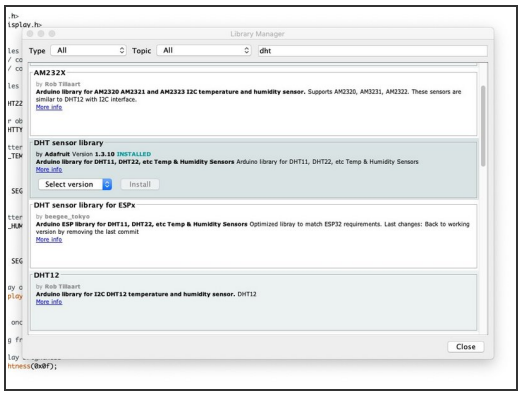






- Install and launch the Arduino software.
- Click on the **Sketch** menu, select **Include Library**, and then **Manage Libraries...**
- On the top right side type **TM1637** and it will show the results in the bottom of the window. We want the **TM1637** by **Avishay Orpaz**. Click the **Install** button.
- The library will be downloaded and **installed**, and then show the word Installed along with the version number.
- If you are done installing libraries click the **Close** button in the lower right corner.
- (These instructions can also be found in the PDF file **Installing-TM1637-Library.pdf**)

Step 3 — Install DHT library

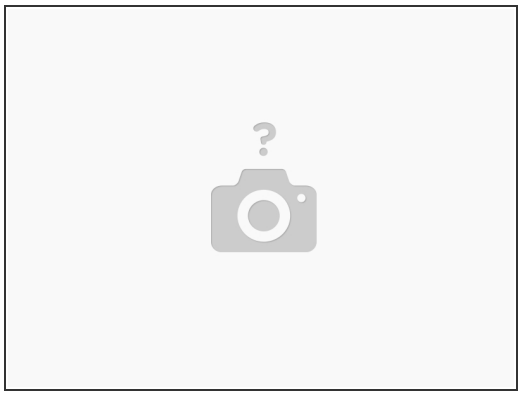




- On the top right side type **DHT** and it will show the results in the bottom of the window. We want the **DHT sensor library** by **Adafruit**. Click the **Install** button.

ⓘ You can choose **Install 'DHT sensor library' only** as we will not need the other library files.

- The library will be downloaded and **installed**, and then show the word Installed along with the version number.
- If you are done installing libraries click the **Close** button in the lower right corner.
- (These instructions can also be found in the PDF file **Installing-DHT-Arduino-Library.pdf**)

Step 4 — Upload the Code



- Upload the Arduino sketch to the Robotics Board.
- You can find the code here: https://github.com/BrownDogGadgets/Crazy...