

M14-Exercise 3 for M14-Assignment

This demo uses the Wire library I2C OLED display and Launchpad Board in `Grove_-_OLED_Display_0.96`

This dynamically displays alternating text and bitmap patterns

Download Grove_-_OLED_Display_0.96.zip from the web site.

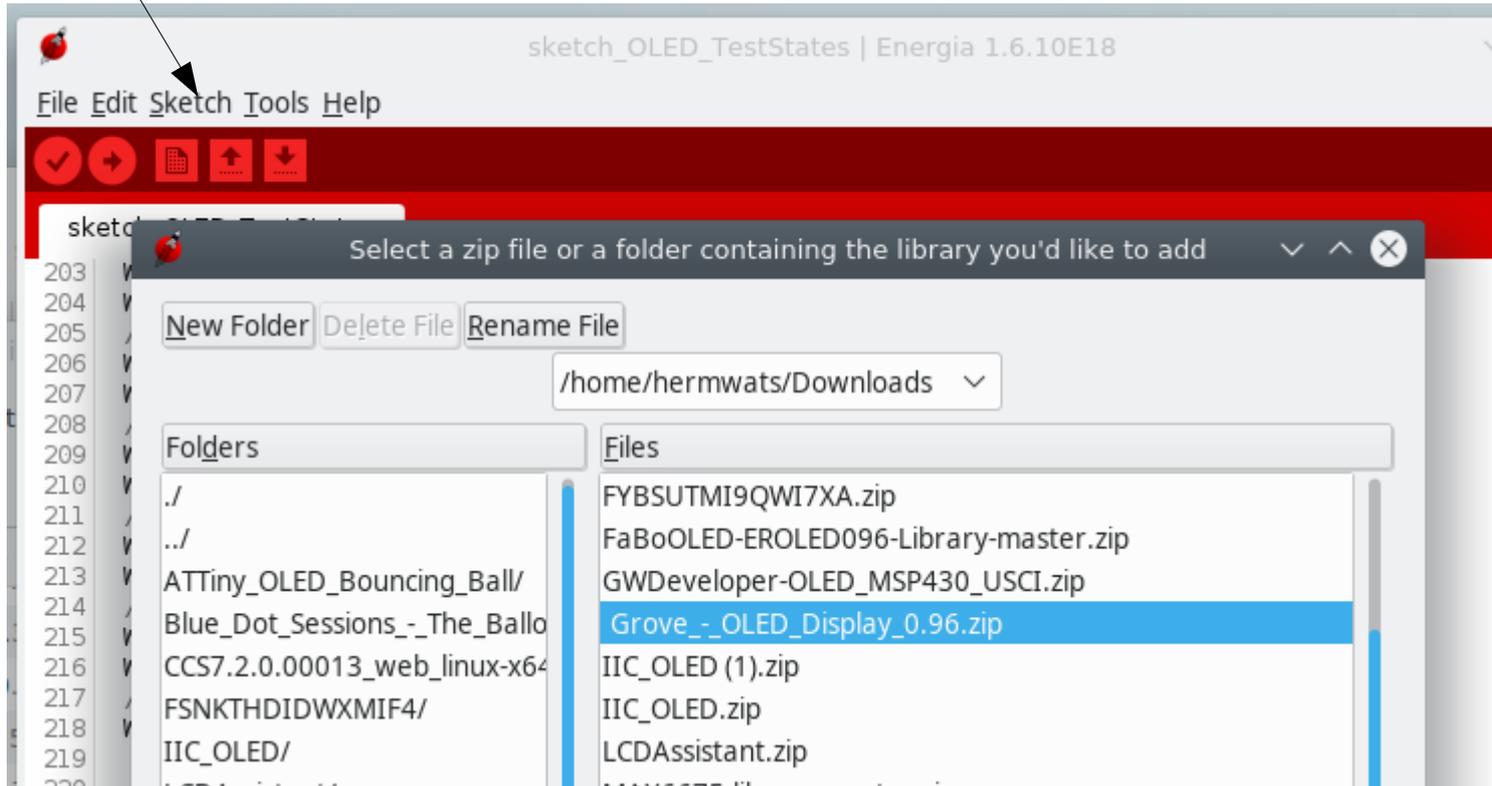
Install as library

Go to Examples and load the OLED_Z_Display_Driver_Test_Suite

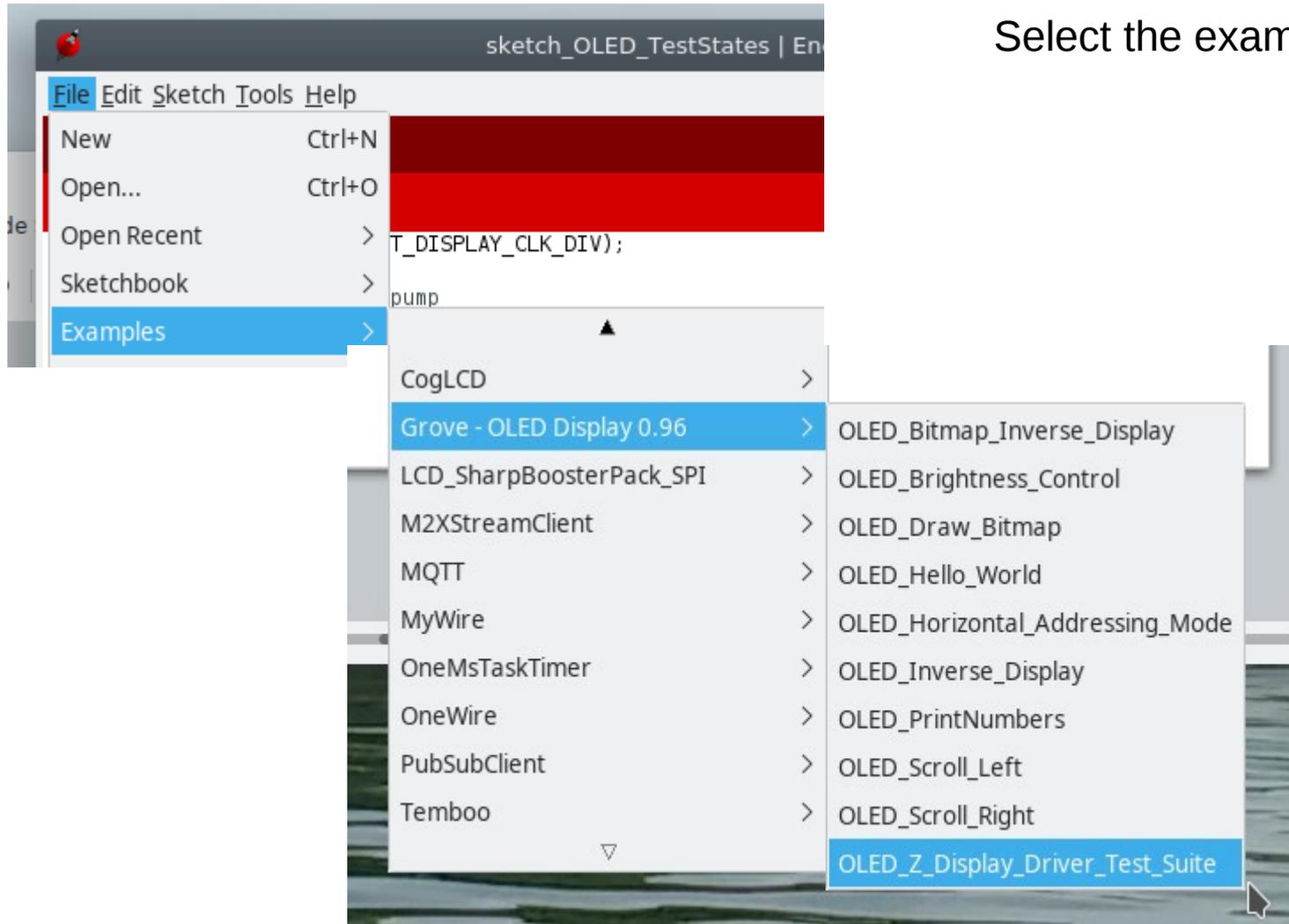
Save as a sketch.

Compile and run

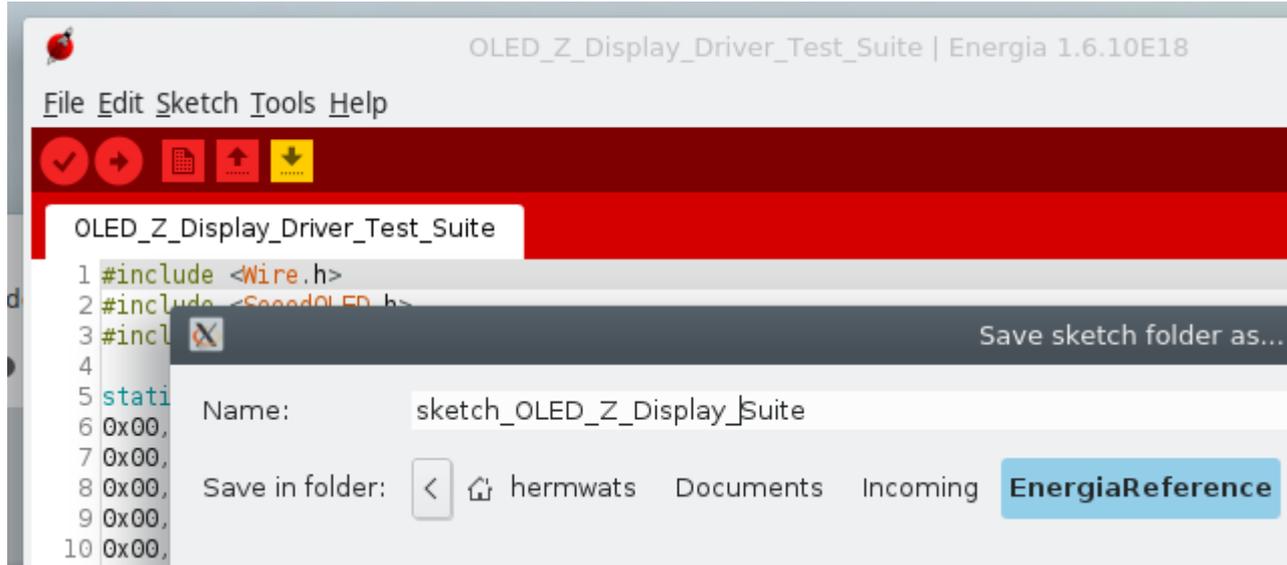
Load the zip library after downloading from the class web site



Select the example Display Test Suite



Save the sketch before trying to compile and upload



```
1 #include <Wire.h>
2 #include <SeeedOLED.h>
3 #include <avr/pgmspace.h>
4
5 static const unsigned char SeeedLogo[] PROGMEM ={
6 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0
7 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0
```

```
109 setDisplayToOriginalState(1);
110
111 SeeedOled.clearDisplay(); //clear the screen and set start position to top left corner
112 SeeedOled.setNormalDisplay(); //Set display to normal mode (i.e non-inverse mode)
113 SeeedOled.setPageMode(); //Set addressing mode to Page Mode
114 SeeedOled.setTextXY(0,0); //Set the cursor to Xth Page, Yth Column
115 SeeedOled.putString("Hello World!"); //Print the String
```



```
118  setDisplayToOriginalState(2);
119
120  SeeedOled.clearDisplay();           //clear the screen and set start position to top left corner
121  SeeedOled.setNormalDisplay();     //Set display to Normal mode
122  SeeedOled.setPageMode();         //Set addressing mode to Page Mode
123  SeeedOled.setTextXY(0,0);        //Set the cursor to 0th Page, 0th Column
124  SeeedOled.putNumber(123);        //Print number
125  SeeedOled.setTextXY(1,0);       //Set the cursor to 1st Page, 0th Column
126  SeeedOled.putNumber(0xFFFF);    //Print number
127  SeeedOled.setTextXY(2,0);       //Set the cursor to 2nd Page, 0th Column
128  SeeedOled.putNumber(0xFFFFFFFF); //Print number
129  SeeedOled.setTextXY(3,0);       //Set the cursor to 3rd Page, 0th Column
130  SeeedOled.putNumber(-12345);    //Print number
131
```



Sketch uses 6,386 bytes (41%) of program storage space. Maximum is 15,360 bytes. Global variables use 136 bytes (3%) of dynamic memory, leaving 3,960 bytes for local variables. Maximum is 4,096 bytes.

```
132  
133   setDisplayToOriginalState(3);  
134  
135   SeeedOled.clearDisplay();           //clear the screen and set start position to top left corner  
136   SeeedOled.setNormalDisplay();      //Set display to Normal mode  
137   SeeedOled.setHorizontalMode();     //Set addressing mode to Horizontal Mode  
138   SeeedOled.putString("!\"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNopQRSTUVWXYZ[\\]^_`abcdefghijklmnopqrstuvwxy{z{|}~");  
139
```



```
160  
161 setDisplayToOriginalState(7);  
162  
163 SeeedOled.clearDisplay(); // clear the screen and set start position to top left corner  
164 SeeedOled.drawBitmap((unsigned char*) SeeedLogo,1024); // 1024 = 128 Pixels * 64 Pixels / 8  
165 SeeedOled.setHorizontalScrollProperties(Scroll_Right,4,7,Scroll_5Frames); //Set the properties of Horizontal Scrol  
166 SeeedOled.activateScroll(); // Activate Scroll  
167 delay(5000);  
168
```

