

Arduino Board with 16x2 LCD Shield

The Arduino is programmed up already so just power it up using the supplied USB cable to see a demonstration program running!

Note: the LCD shield detaches from the Arduino (e.g. to access the I/O pins and connect to the breadboard). Gently pull apart being careful not to bend the pins.

Programming the Arduino

<https://www.arduino.cc>

<https://www.arduino.cc/en/Main/Software>

16x2 LCD Shield

<http://www.hobbytronics.co.uk/arduino-lcd-keypad-shield>

<https://www.arduino.cc/en/Reference/LiquidCrystal>

Source Code

https://github.com/codewrite/Steen_Christmas

https://raw.githubusercontent.com/codewrite/Steen_Christmas/master/Steen_Christmas.ino

Code Example

```
#include <LiquidCrystal.h>

// initialize the library with the numbers of the interface pins
LiquidCrystal lcd(8, 9, 4, 5, 6, 7); // adjust this to suit your
pins.

void setup()
{
    // put your setup code here, to run once:
    // set up the LCD's number of rows and columns:
    lcd.begin(16, 2);
}

int step = 0;
bool restart = false;

void loop()
{
    // put your main code here, to run repeatedly:

    if (step == 0)
    {
        if (restart)
        {
            lcd.setCursor(0, 0);
            lcd.print(F("From Jon           Happy Christmas"));
            lcd.setCursor(0, 1);
            lcd.print(F("and Lucy       **** Steen ****"));
            restart = false;
            delay(2000);
        }
        else
        {
            lcd.setCursor(0, 0);
            lcd.print(F("           Happy Christmas"));
            lcd.setCursor(0, 1);
            lcd.print(F("**** Steen ****"));
        }
    }
    else if (step <= 16)
    {
        lcd.scrollDisplayLeft();
    }
    else if (step <= 24)
    {
        if (step % 2 == 0)
        {
            lcd.setCursor(16, 1);
            lcd.print(F("      Steen      "));
        }
        else
        {
            lcd.setCursor(16, 1);
            lcd.print(F("**** Steen ****"));
        }
    }
}
```

```
}  
else  
    restart = true;  
  
if (restart)  
{  
    lcd.home();  
    step = 0;  
}  
else  
    step++;  
  
delay(500); //ms  
}
```