TERRAN BLAKE // WEDNESDAY 7:30AM // ECE 241

#include<LiquidCrystal.h>

```
int minutes = 00;
                     //These global integers keep the value of the clock
int sec = 00;
int hr = 0;
const long interval = 1000;
                                             //This interval is equal to 1 second and will be added to seconds
unsigned long oldMillis = 0;
LiquidCrystal LcdDriver(11, 9, 5, 6, 7, 8);
int count;
void setup() {
// put your setup code here, to run once:
LcdDriver.begin(16, 2);
LcdDriver.clear();
LcdDriver.setCursor(0, 0);
void loop() {
LcdDriver.setCursor(0,1);
unsigned long currentMillis = millis();
 if(currentMillis - oldMillis >= interval) {
                                                 //This sets up the timer so that it can add one second to the integer
  oldMillis = currentMillis;
  sec++;
  if(hr < 10) {
   LcdDriver.print(0);
                                             //Prints an extra 0 if hr < 10
  LcdDriver.print(hr);
                                             //These LcdDriver print values print the values of the clock
  LcdDriver.print(":");
  LcdDriver.print(minutes);
  if(minutes < 10) {
   LcdDriver.print(0);
                                             //Prints an extra 0 if minutes < 10
  LcdDriver.print(":");
  if(sec < 10) {
   LcdDriver.print(0);
                                             //Prints an extra 0 if minutes < 10
  LcdDriver.print(sec);
  if(sec > 59) {
                                        //Adds to minutes whenever seconds is = to 60
   minutes++;
   sec = 0;
}
  if(minutes > 59) {
                                           //Adds to hours whenever minutes is = to 60
   hr++;
   minutes = 0;
}
  if(hr > 23) {
                                       //Resets the clock whenever hours is = to 24
   hr = 0;
}
}
```