



# THE GENTLE WAKE UP ALARM CLOCK

AN EXPLAINER VIDEO ON MY PROJECT

PRESENTED BY:

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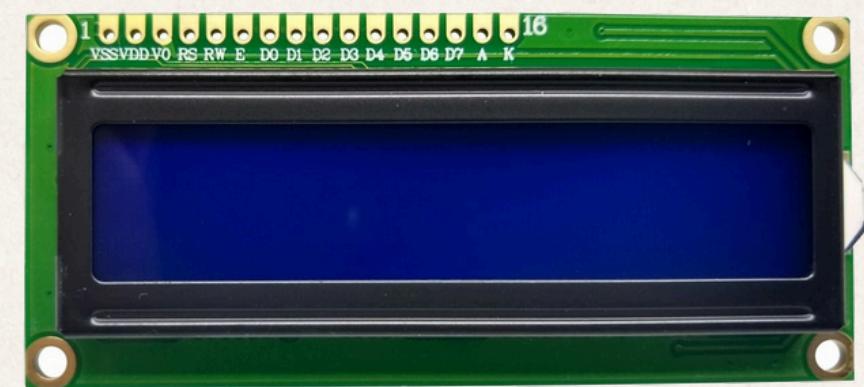
STUDENT NUMBER:

25283641



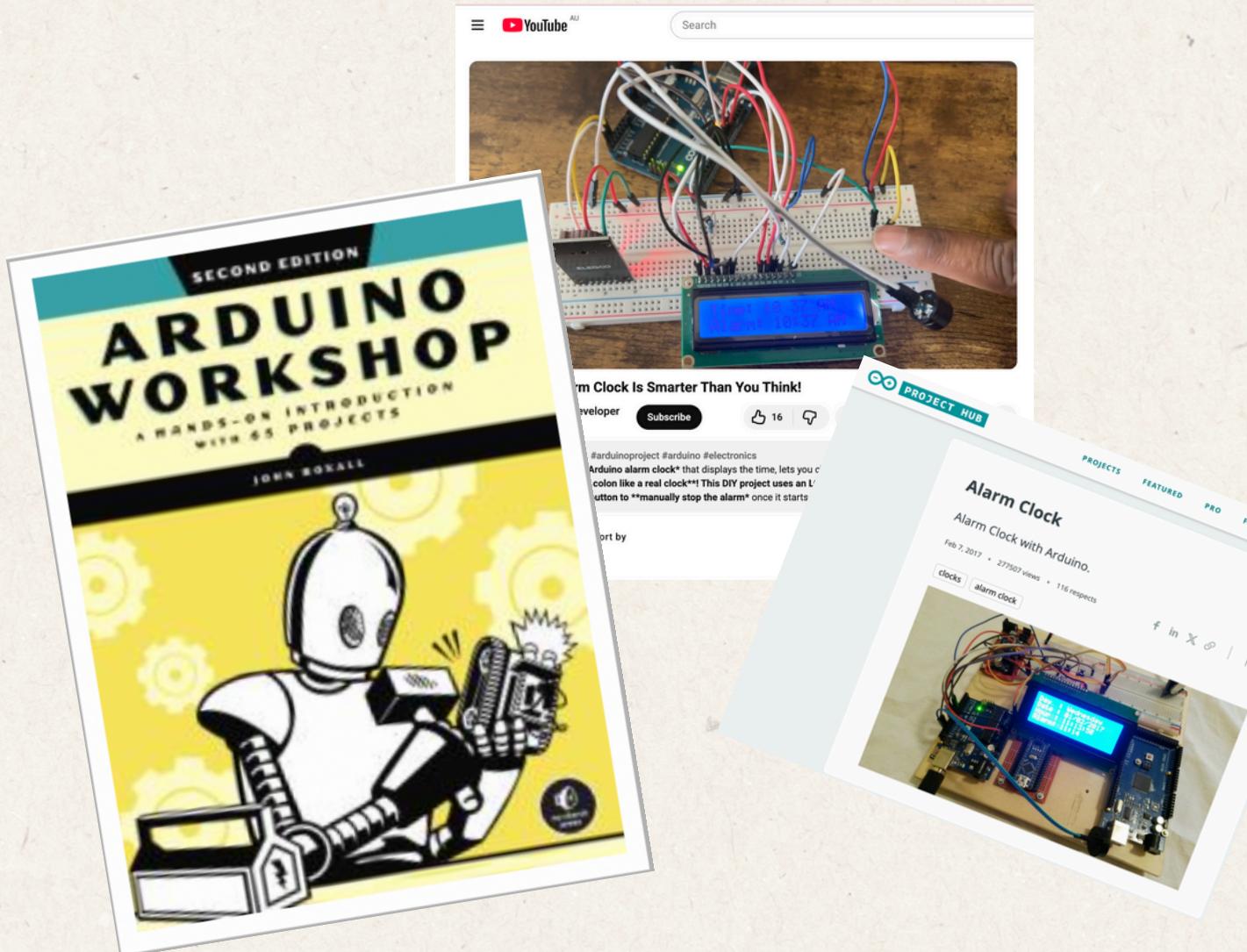
# THE GENTLE WAKE UP ALARM CLOCK

**LIBRARIES:** LiquidCrystal, Wire.h, and RTClib



# Arduino Code Structure:

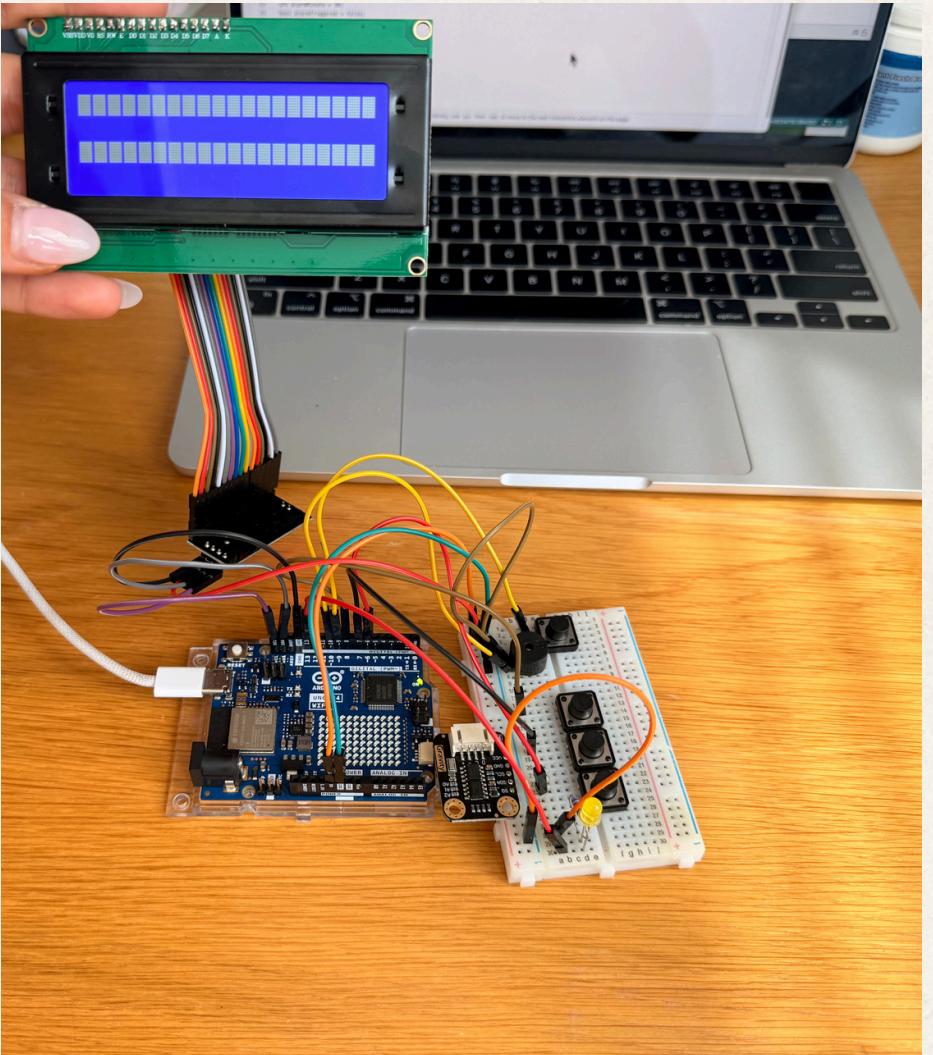
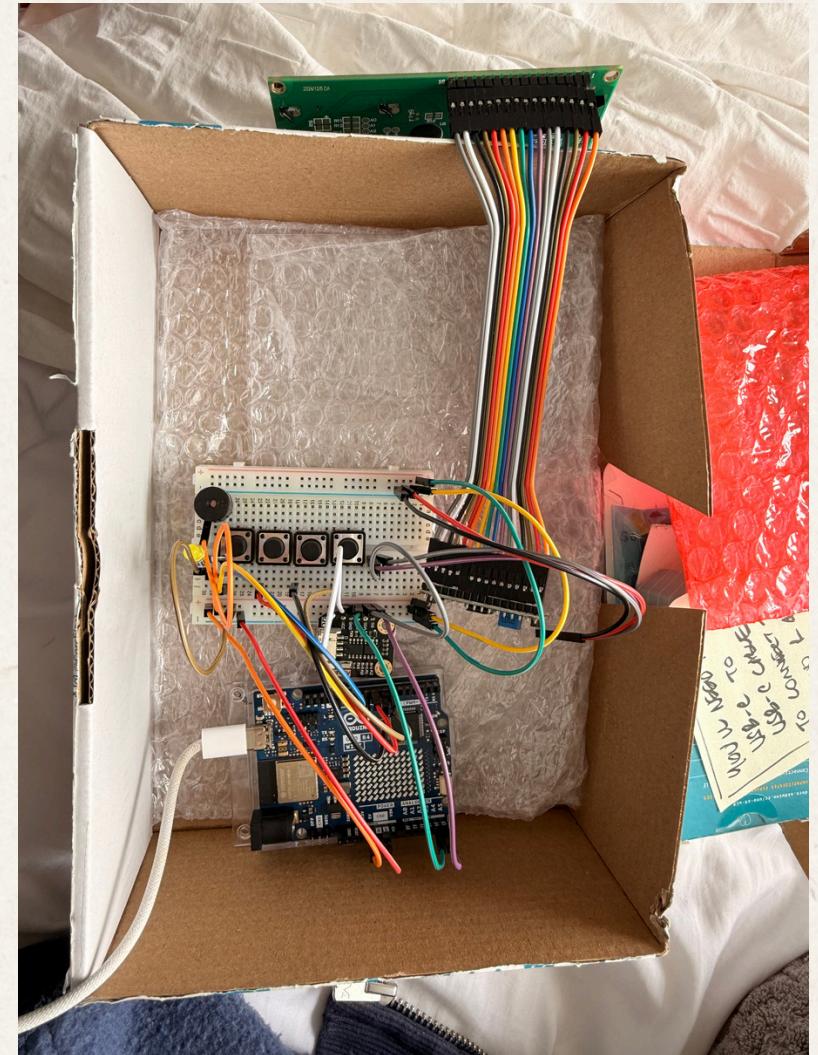
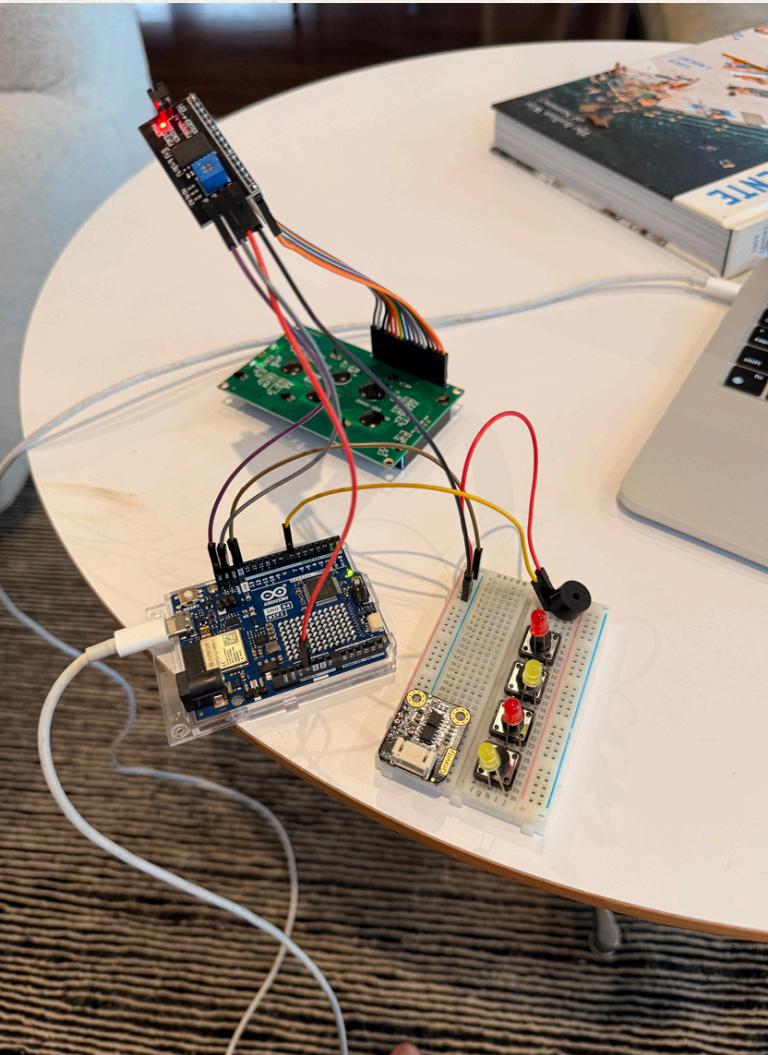
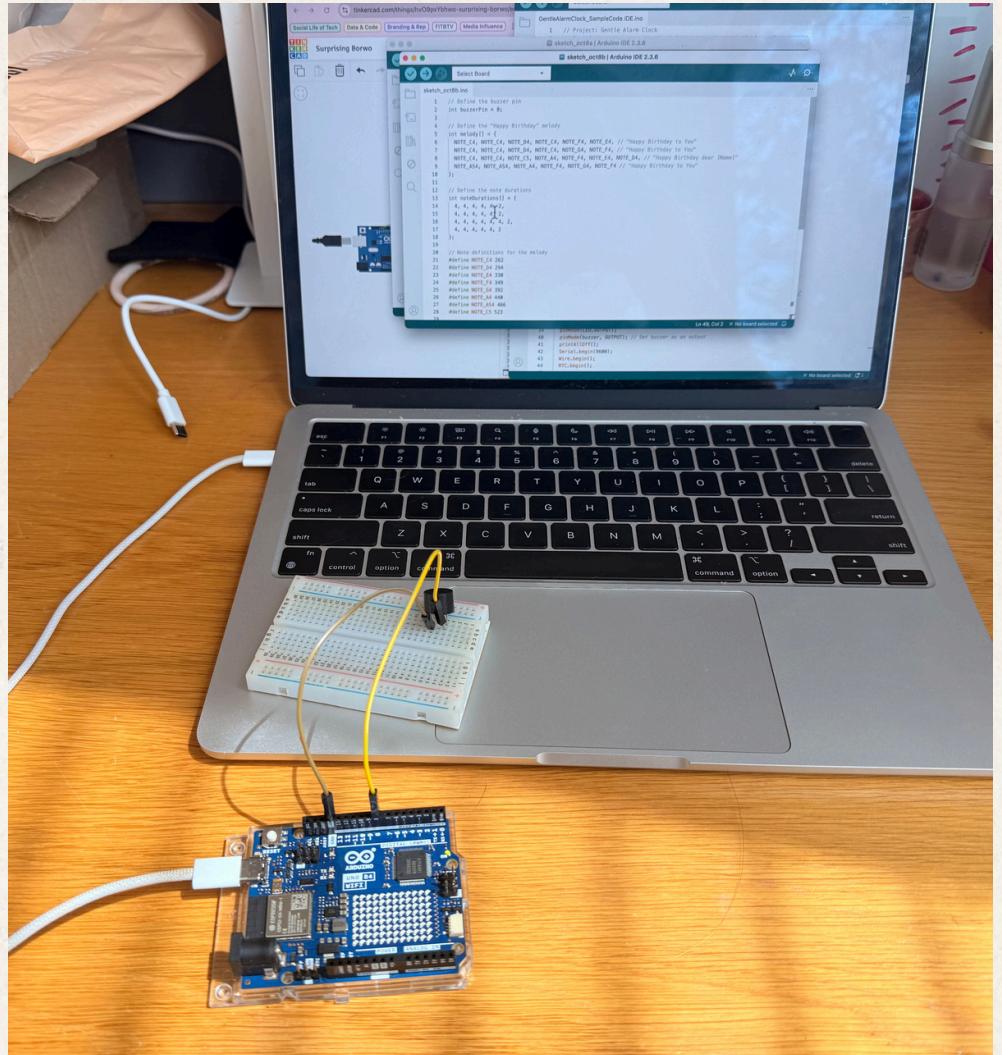
lines 1–42 of the program were dedicated to preparing essential elements of the alarm clock, including setting up the display, defining button functions, establishing melody notes, and configuring the alarm time.



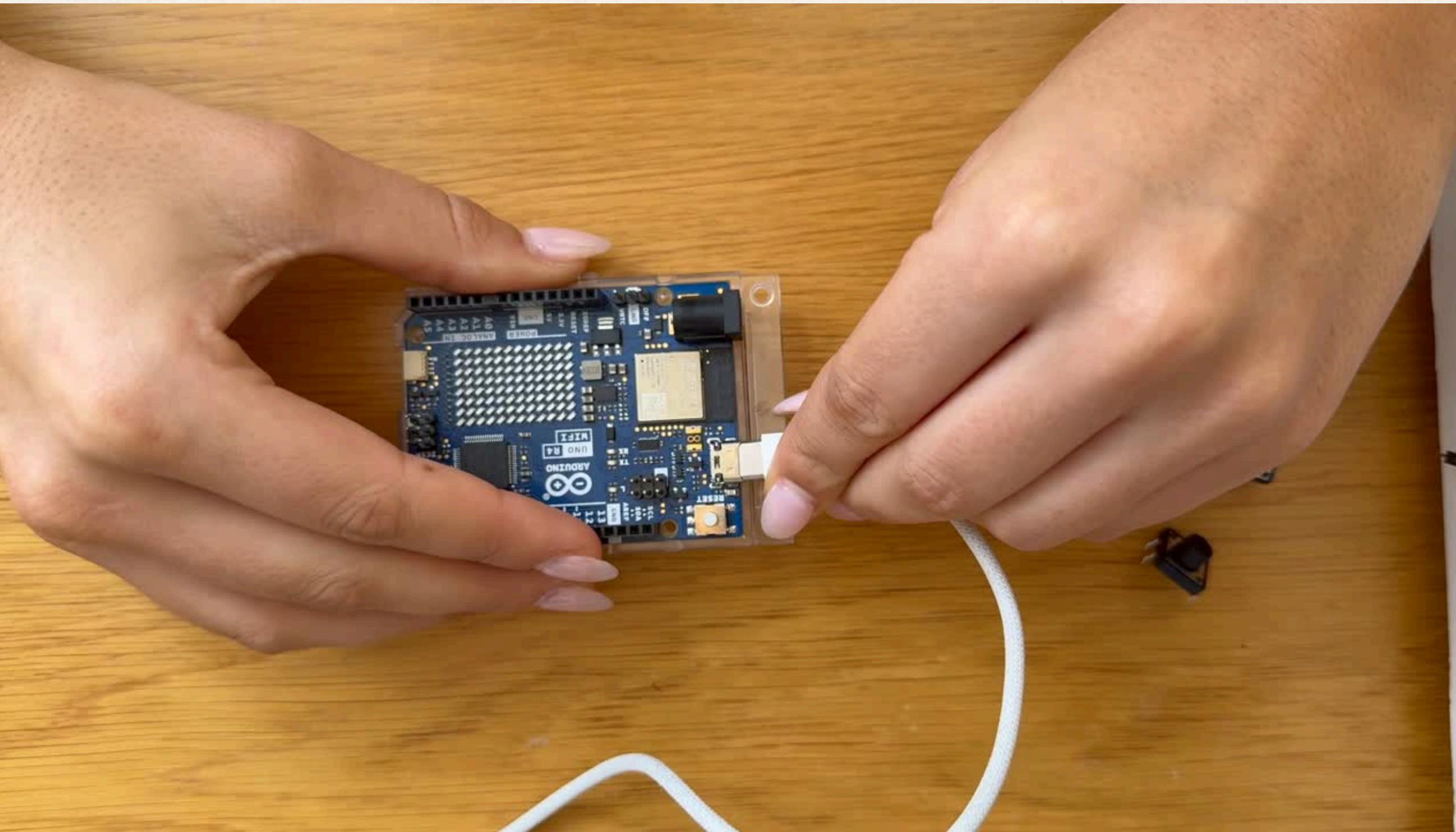
```
CK-GentleAlarmClock_Final-Draft.IDE | Arduino IDE 2.  
Arduino UNO R4 WiFi  
GentleAlarmClock_Final-Draft.IDE.ino  
1 // Project: Gentle Wake Up Alarm Clock  
2 #include <Wire.h>  
3 #include <RTClib.h>  
4 #include <LiquidCrystal.h>  
5  
6 // --- LCD Setup ---  
7 LiquidCrystal lcd(7, 8, 9, 10, 11, 12);  
8  
9 // --- RTC Module ---  
10 RTC_DS1307 rtc;  
11  
12 // --- Pin Definitions ---  
13 #define LED_PIN 13  
14 #define BUZZER_PIN 6  
15 #define BTN_SET 2  
16 #define BTN_PLUS 3  
17 #define BTN_MINUS 4  
18 #define BTN_ALARM 5  
19  
20 // --- Variables ---  
21 int alarmHour = 6;  
22 int alarmMinute = 30;  
23 bool alarmTriggered = false;  
24 bool alarmEnabled = true;  
25  
26 bool colonVisible = true;  
27 unsigned long lastBlinkTime = 0;  
28 const int blinkInterval = 1000;  
29  
30 // --- Tone Notes ---  
31 #define NOTE_C4 262  
32 #define NOTE_D4 294  
tput gdb-server
```



# Progress

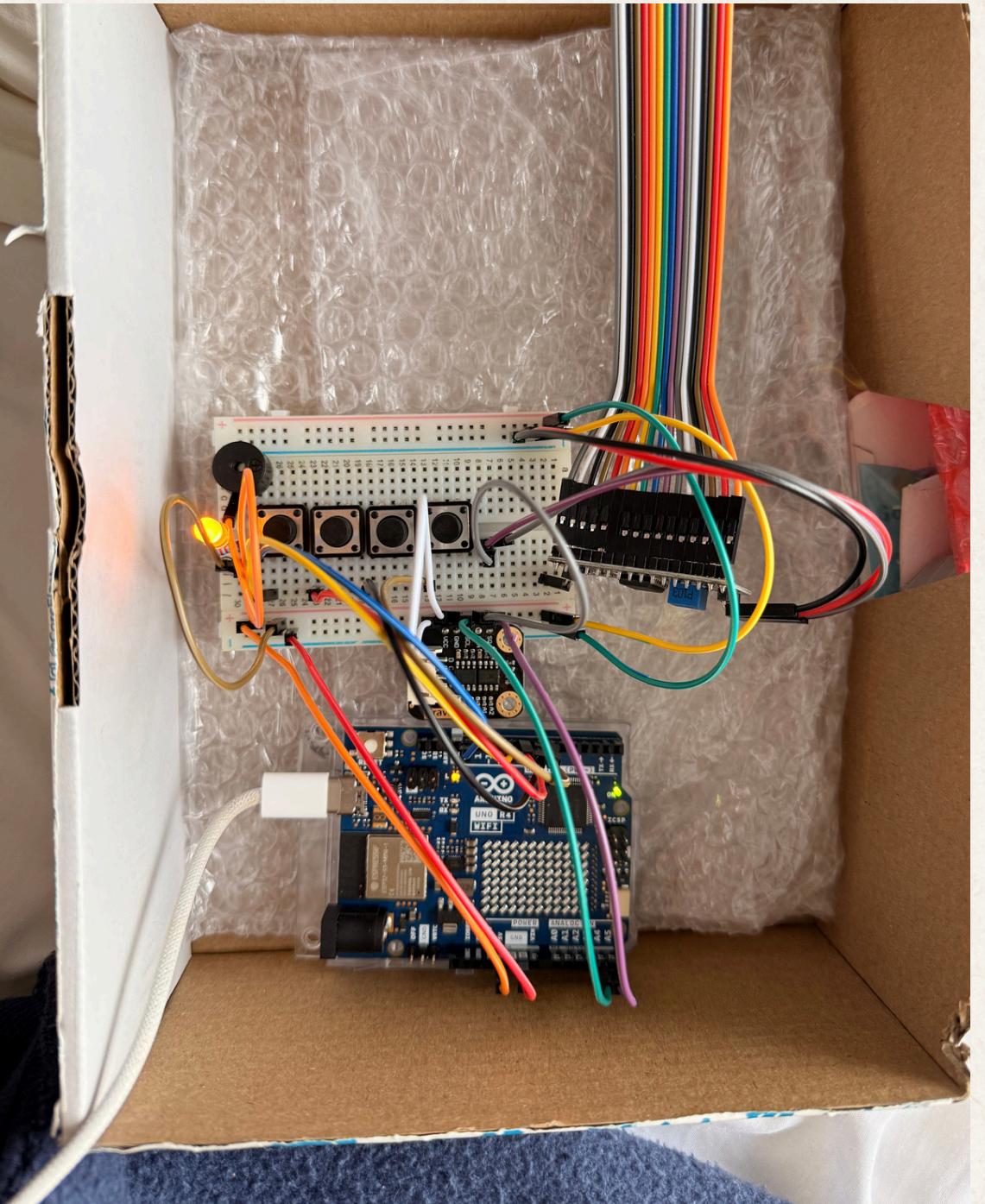
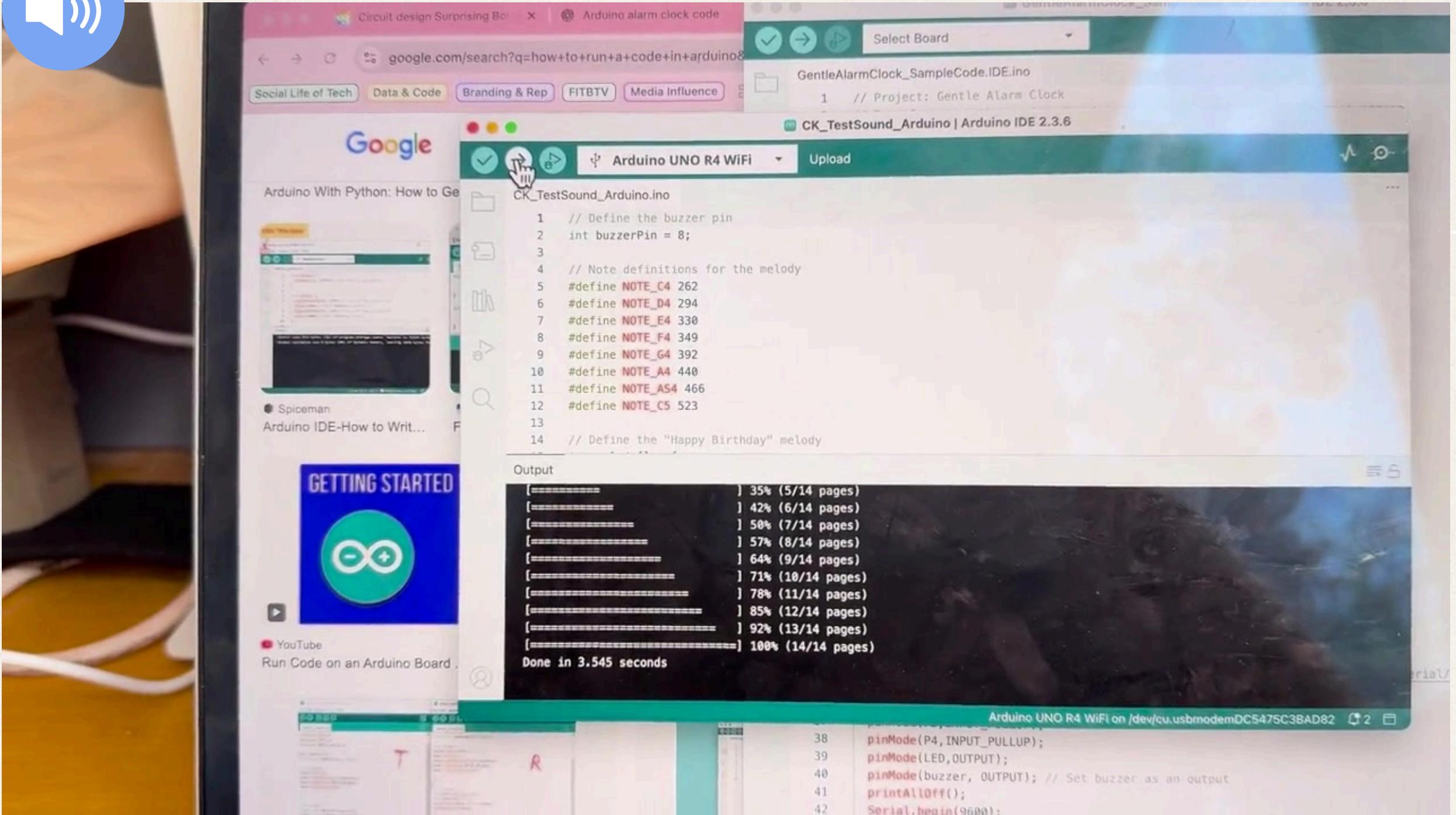


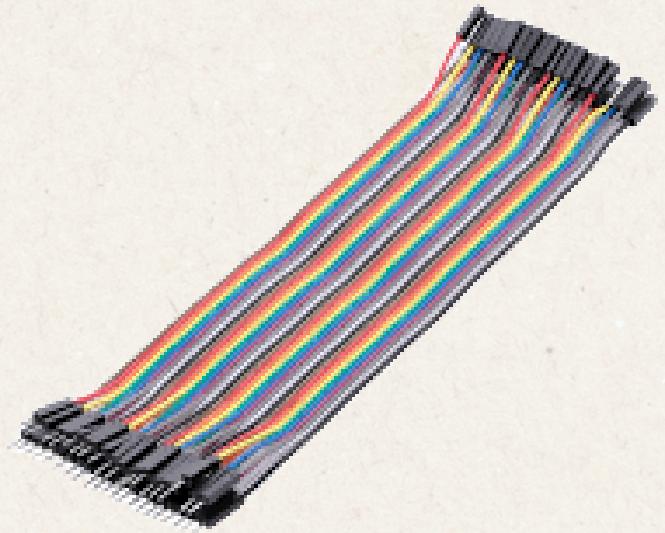
★★★  
**The Process:**





# Achievements





# Thank you

