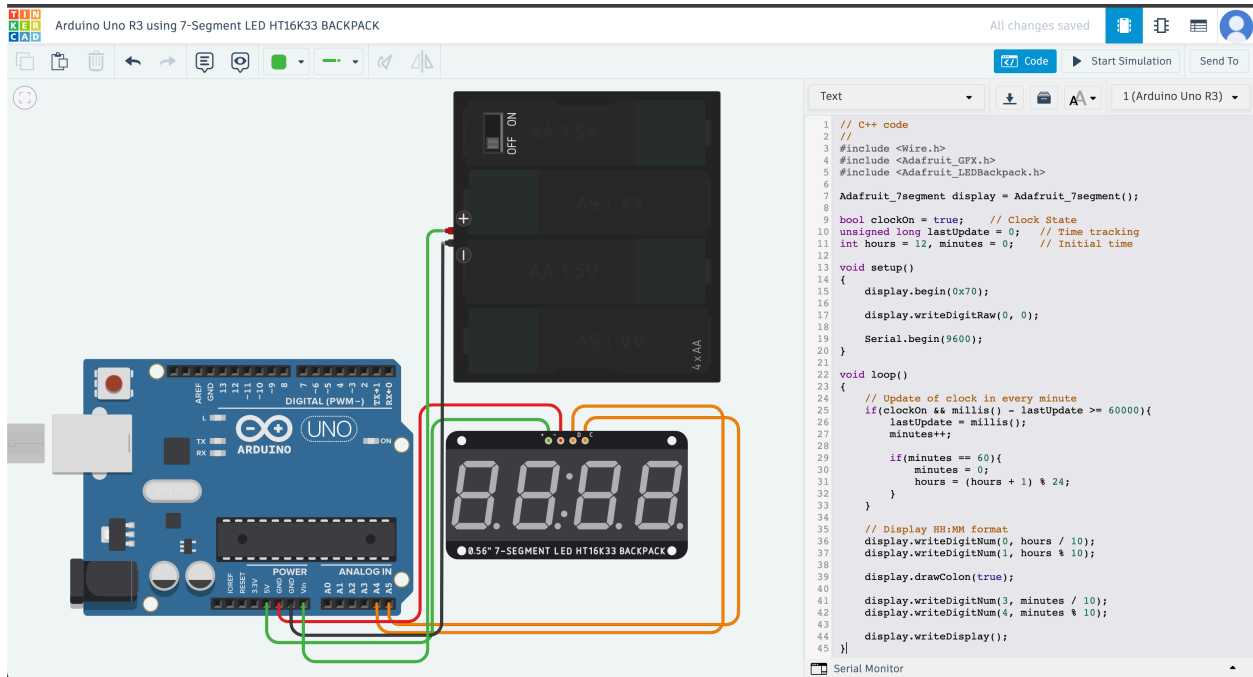# Arduino Uno R3 using 7-Segment LED HT16K33 BACKPACK

Image:

Code:

```cpp
// C++ code
//
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_LEDBackpack.h>

Adafruit_7segment display = Adafruit_7segment();

bool clockOn = true;  // Clock State
unsigned long lastUpdate = 0;        // Time tracking
int hours = 12, minutes = 0;   // Initial time

void setup()
{
        display.begin(0x70);

        display.writeDigitRaw(0, 0);

        Serial.begin(9600);
}

void loop()
{
        // Update of clock in every minute
        if(clockOn && millis() - lastUpdate >= 60000){
```

```
            lastUpdate = millis();
            minutes++;

            if(minutes == 60){
                    minutes = 0;
                    hours = (hours + 1) % 24;
            }
    }

    // Display HH:MM format
    display.writeDigitNum(0, hours / 10);
    display.writeDigitNum(1, hours % 10);

    display.drawColon(true);

    display.writeDigitNum(3, minutes / 10);
    display.writeDigitNum(4, minutes % 10);

    display.writeDisplay();
}
```