SNEK

[the unnecessarily small snake game]

Hook up the following in conjunction, using Arduino UNO or NANO.

Recommend securing the 4digit 7segment display first, and testing it with some simple code. Then apply the joy-stick (SW switch is not necessary).

It is necessary to use *multiplexing* in order to display unique symbols on unique digits. This requires switching back and forth between symbol-digit combinations – turning them on and off in between switching. Example code in C is,
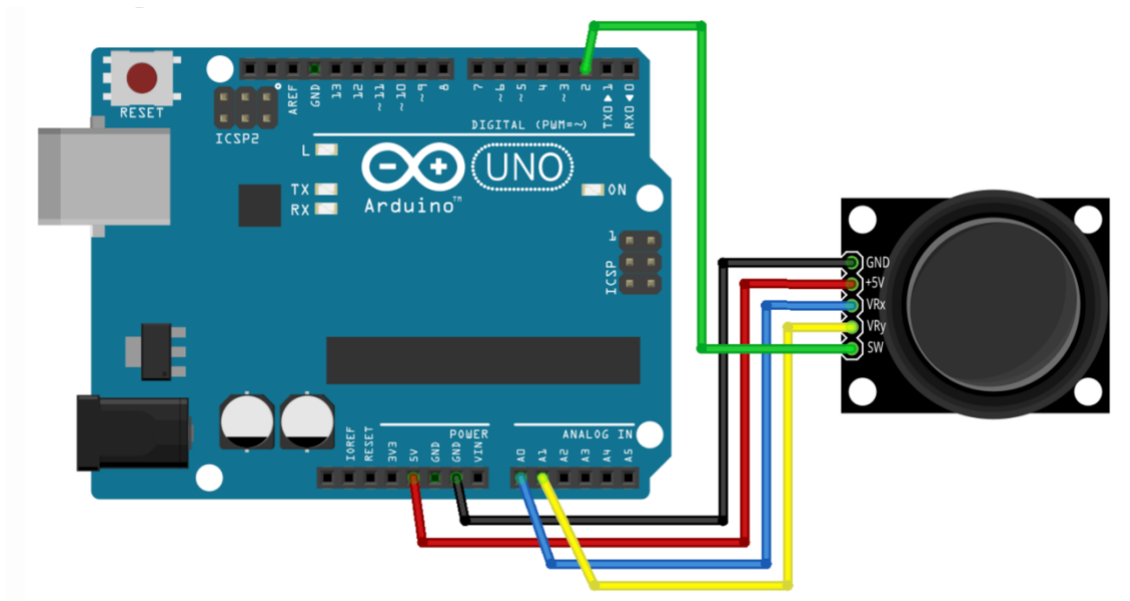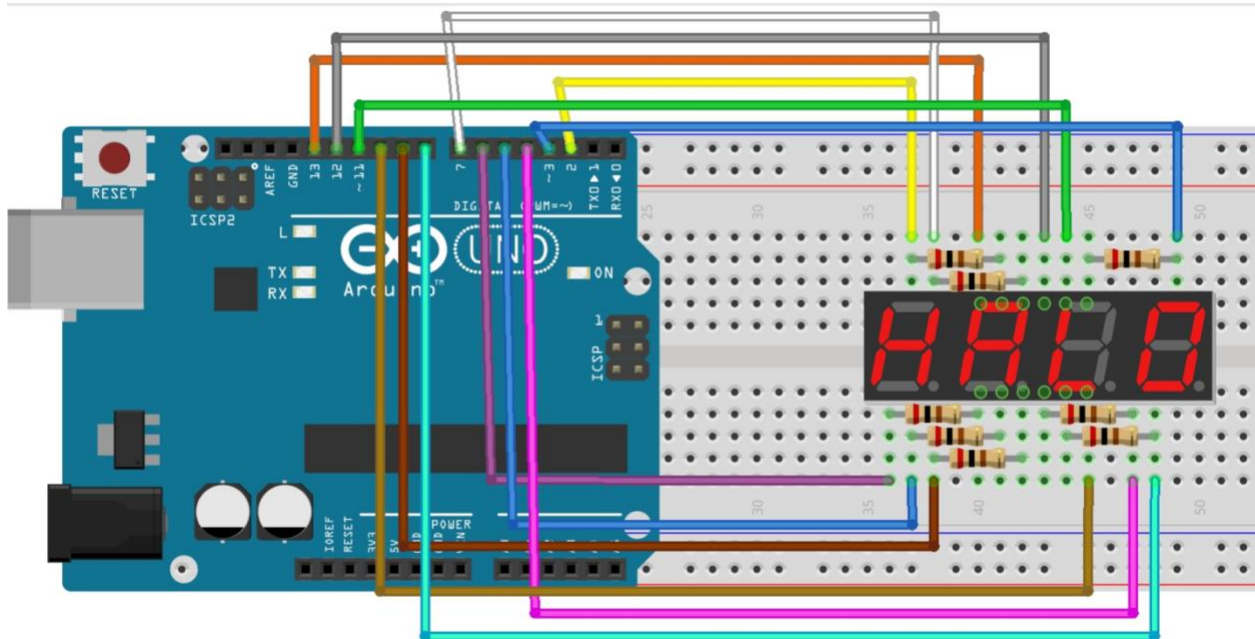
```c
long startT = millis();
long endT = startT;


while ((endT - startT) < 100) {
        for (int i=0; i<4; i++) {
                clearLEDs();
                digitalWrite(convertd[i], HIGH);
                digitalWrite(convertp[i], LOW);
        }
        endT = millis();
```

```
          }
```
In the code above, the convertd() and convertp() functions simply translate your digits "d" 0-4 to your associated digital pins, likewise for translating pins a-dp "p" (segments) to their pins.

The exact layout of digit and segment wires to pins is arbitrary, so long as the proper mapping can be made inside the code. Note this is not true for the joystick.

Good luck!