

ARDUINO UNO

4X4X4 LED CUBE

BY

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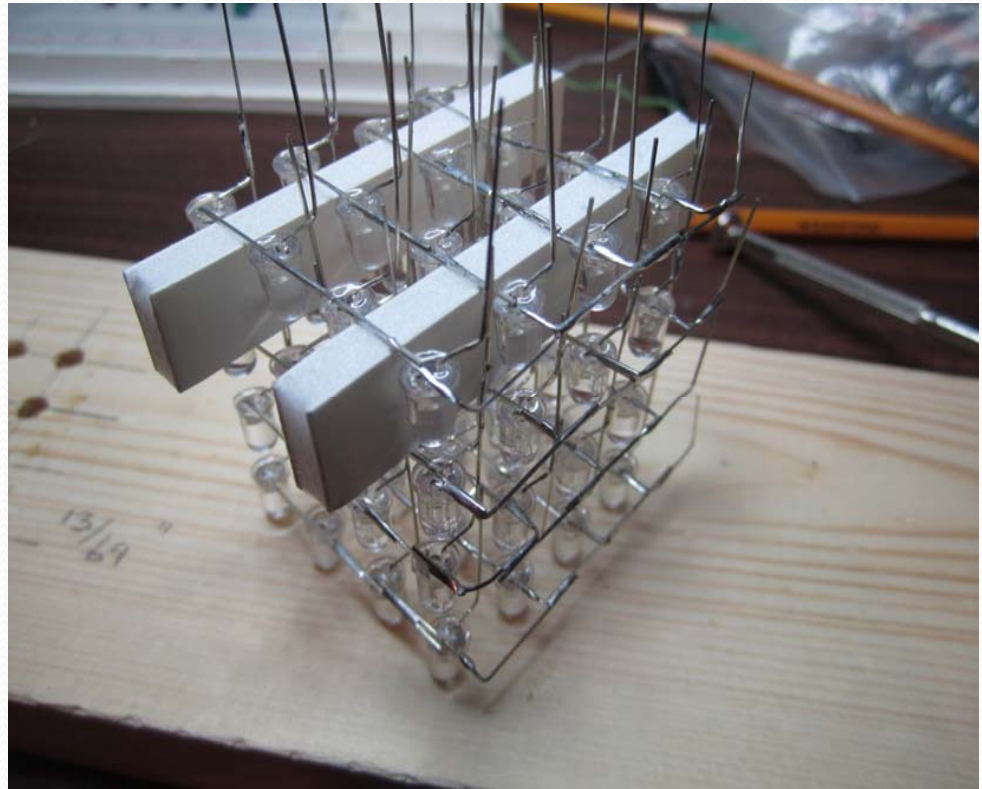
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Outline

- Construction
- Programming
- Final product

Construction

- There are 64, 5mm leds
- There are 16 resistors
- Cathode are connected on each layer
- There are 16 anodes that are connected to the microcontroller.



Programming

- The cathodes at each layer is connected together.
- It is based on C
- Works with a table of LED patterns coded in 1's and 0's

Program Pattern Table

- B0001,B0000,B0000,B0000,B0001,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,10,
- B0011,B0000,B0000,B0000,B0011,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,10,
- B0011,B0010,B0000,B0000,B0011,B0010,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,10,
- B0011,B0011,B0000,B0000,B0011,B0011,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,10,
- B0110,B0110,B0000,B0000,B0110,B0110,B0000,B0000,B0000,B0000,B0000,B0000,B0000,B0000,10,
- B0000,B0000,B0000,B0000,B0110,B0110,B0000,B0000,B0110,B0110,B0000,B0000,B0000,B0000,10,
- B0000,B0000,B0000,B0000,B0000,B0110,B0110,B0000,B0000,B0110,B0110,B0000,B0000,B0000,10,
- B0000,B0000,B0000,B0000,B0000,B0000,B0110,B0110,B0000,B0000,B0110,B0110,B0000,B0000,10,



Final product

- DEMO