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PART.1

The working principle of the binary to decimal decoder is based on the fact that each bit in a binary number represent a power of 2. The most significant bit represent 2^{n-1} , where n is the number of bits in the binary number, and the least significant bit represents 2^0 . To convert a binary number to decimal value, the decoder multiplies each bit by its corresponding power of 2, and then adds the results.

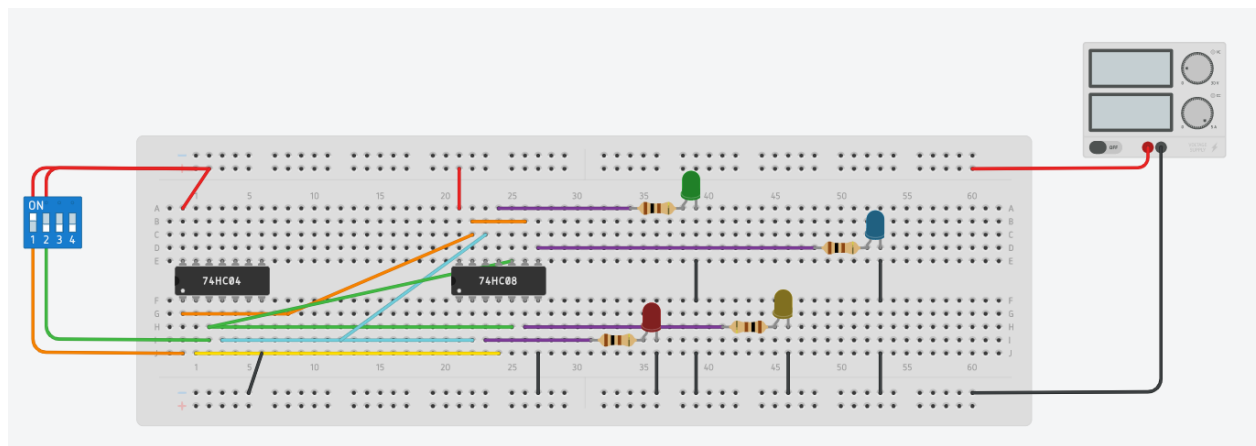
Binary to decimal decoders are used in a wide range of applications, including digital signal processing, computer arithmetic and control systems. They are also used in microprocessors, microcontrollers, and other digital logic circuits to decode binary input signals and generate corresponding output signals.

PART.2

Input		Output			
A	B	C	D	E	F
0	0	1	0	0	0
0	1	0	1	0	0
1	0	0	0	1	0
1	1	0	0	0	1

PART.3

(EXPERIMENTAL DEMONSTRATION)



(MANUAL DEMONSTRATION)

