

# Seven Segment display

Binary	Segments	A B C D E F G
0000000	0000000	0000000
0000001	1000000	1000000
0000010	1100000	1100000
0000011	1110000	1110000
0000100	0110000	0110000
0000101	0111000	0111000
0000110	0111100	0111100
0000111	0111110	0111110
0001000	1010000	1010000
0001001	1011000	1011000
0001010	1011100	1011100
0001011	1011110	1011110
0001100	0101000	0101000
0001101	0101100	0101100
0001110	0101110	0101110
0001111	0101111	0101111
0010000	1100000	1100000
0010001	1110000	1110000
0010010	1111000	1111000
0010011	1111100	1111100
0010100	0110000	0110000
0010101	0111000	0111000
0010110	0111100	0111100
0010111	0111110	0111110
0011000	1010000	1010000
0011001	1011000	1011000
0011010	1011100	1011100
0011011	1011110	1011110
0011100	0101000	0101000
0011101	0101100	0101100
0011110	0101110	0101110
0011111	0101111	0101111
0100000	1100000	1100000
0100001	1110000	1110000
0100010	1111000	1111000
0100011	1111100	1111100
0100100	0110000	0110000
0100101	0111000	0111000
0100110	0111100	0111100
0100111	0111110	0111110
0101000	1010000	1010000
0101001	1011000	1011000
0101010	1011100	1011100
0101011	1011110	1011110
0101100	0101000	0101000
0101101	0101100	0101100
0101110	0101110	0101110
0101111	0101111	0101111
0110000	1100000	1100000
0110001	1110000	1110000
0110010	1111000	1111000
0110011	1111100	1111100
0110100	0110000	0110000
0110101	0111000	0111000
0110110	0111100	0111100
0110111	0111110	0111110
0111000	1010000	1010000
0111001	1011000	1011000
0111010	1011100	1011100
0111011	1011110	1011110
0111100	0101000	0101000
0111101	0101100	0101100
0111110	0101110	0101110
0111111	0101111	0101111

Full adder

A	B	Cin	Sout	Cout
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	1	0
1	1	0	1	0
1	1	1	0	1
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	1	0
1	1	0	1	0
1	1	1	0	1

1 1 2 4  
 1 1 2 4

S0 0 S1 S2 S3 S4 S5 S6

1 1 0 0 0 0 0 0

2 1 1 0 0 0 0 0

3 1 1 0 0 0 0 0

4 0 1 0 0 1 1 0

5 1 0 0 0 0 0 0

6 1 0 1 0 0 0 0

7 1 1 1 0 0 0 0

8 1 1 1 0 0 0 0

9 1 1 1 0 0 0 0

A 10 1 0 0 0 0 1

B 11 1 1 0 0 0 1

C 12 1 0 1 0 0 1

D 13 1 1 1 0 0 1

E 14 1 1 1 0 0 1

F 15

~~4/7/2022~~

12:45 PM

AP

S947