|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DIGIT 1 | DIGIT 2 | Colon 1 | DIGIT 3 | DIGIT 4 | DIGIT 5 | Colon 2 | DIGIT 6 | DIGIT 7 | DIGIT 8 |
|  | Maximum number that can be display on Seven Segment Display using N segments  - GeeksforGeeks |  |  |  |  |  |  |  |  |

Display Segments -> Payload

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F | G |
| DIGIT 1 | 1,6 | 1,5 | 2,3 | 2,2 | 2,1 | 1,7 | 1,4 |
| DIGIT 2 | 1,2 | 1,1 | 2,7 | 2,6 | 2,5 | 1,3 | 1,0 |
| DIGIT 3 | 0,6 | 0,5 | 3,3 | 3,2 | 3,1 | 0,7 | 0,4 |
| DIGIT 4 | 0,2 | 0,1 | 3,7 | 3,6 | 3,5 | 0,3 | 0,0 |

Coon 1 = 2,4 | Digit 1 H,I = 2,0 | Digit 3 DP = 3,4 | Digit 2 DP = 3,0 | Colon 2 = 4,7

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A1 | A2 | B | C | D1 | D2 | E | F | G1 | G2 | H | I | J | K | L | m |
| Digit 5 | 5,4 | 5,2 | 5,0 | 6,7 | 6,3 | 6,5 | 6,1 | 5,6 | 5,7 | 7,0 | 5,5 | 5,3 | 5,1 | 6,6 | 6,4 | 6,2 |
| Digit 6 | 4,3 | 4,1 | 11,7 | 7,7 | 7,3 | 7,5 | 7,1 | 4,5 | 4,6 | 8,0 | 4,4 | 4,2 | 4,0 | 7,6 | 7,4 | 7,2 |
| Digit 7 | 11,3 | 11,1 | 10,7 | 8,7 | 8,3 | 8,5 | 8,1 | 11,5 | 11,6 | 9,0 | 11,4 | 11,2 | 11,0 | 8,6 | 8,4 | 8,2 |
| Digit 8 | 10,2 | | 10,0 | 9,6 | 9,4 | | 9,1 | 10,5 | 10,6 | 9,7 | 10,4 | 10,3 | 10,1 | 9,5 | 9,3 | 9,2 |

Payload -> Display Segments

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 |
| Byte 0 | 3, F | 3, A | 3, B | 3, G | 4, F | 4, A | 4, B | 4, G |
| Byte 1 | 1, F | 1, A | 1, B | 1, G | 2, F | 2, A | 2, B | 2, G |
| Byte 2 | 2, C | 2, D | 2, E | COLON 1 | 1, C | 1, D | 1, E | 1, H+I |
| Byte 3 | 4, C | 4, D | 4, E | 3, DP | 3, C | 3, D | 3, E | 2, DP |
| Byte 4 | COLON 2 | 6, G1 | 6, F | 6, H |  |  |  |  |
| Byte 5 |  |  |  |  |  |  |  |  |
| Byte 6 |  |  |  |  |  |  |  |  |
| Byte 7 |  |  |  |  |  |  |  |  |
| Byte 8 |  |  |  |  |  |  |  |  |
| Byte 9 |  |  |  |  |  |  |  |  |
| Byte 10 |  |  |  |  |  |  |  |  |
| Byte 11 |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bit 7 | Bit 6 | Bit 5 | Bit 4 | Bit 3 | Bit 2 | Bit 1 | Bit 0 |  |
| Byte 0 | DIGIT 3,F | DIGIT 3,A | DIGIT 3,B | DIGIT 3,G | DIGIT 4,F | DIGIT 4,A | DIGIT 4,B | DIGIT 4,G |  |
| Byte 1 | DIGIT 1,F | DIGIT 1,A | DIGIT 1,B | DIGIT 1,G | DIGIT 2,F | DIGIT 2,A | DIGIT 2,B | DIGIT 2,G |  |
| Byte 2 | DIGIT 2,C | DIGIT 2,D | DIGIT 2,E | COLON 1 | DIGIT 1,C | DIGIT 1,D | DIGIT 1,E | 1, H+I |  |
| Byte 3 | DIGIT 4,C | DIGIT 4,D | DIGIT 4,E | 3, DP | DIGIT 3,C | DIGIT 3,D | DIGIT 3,E | 2, DP |  |
| Byte 4 | COLON 2 | DIGIT 6,G1 | DIGIT 6,F | DIGIT 6,H | DIGIT 6,A1 | DIGIT 6,I | DIGIT 6,A2 | DIGIT 6,J |  |
| Byte 5 | DIGIT 5,G1 | DIGIT 5,F | DIGIT 5,H | DIGIT 5,A1 | DIGIT 5,I | DIGIT 5,A2 | DIGIT 5,J | DIGIT 5,B |  |
| Byte 6 | DIGIT 5,C | DIGIT 5,K | DIGIT 5,D2 | DIGIT 5,L | DIGIT 5,D1 | DIGIT 5,M | DIGIT 5,E | UNKNOWN |  |
| Byte 7 | DIGIT 6,C | DIGIT 6,K | DIGIT 6,D2 | DIGIT 6,L | DIGIT 6,D1 | DIGIT 6,M | DIGIT 6,E | DIGIT 5,G2 |  |
| Byte 8 | DIGIT 7,C | DIGIT 7,K | DIGIT 7,D2 | DIGIT 7,L | DIGIT 7,D1 | DIGIT 7,M | DIGIT 7,E | DIGIT 6,G2 |  |
| Byte 9 | DIGIT 8,G2 | DIGIT 8,C | DIGIT 8,K | DIGIT 8,D1 | DIGIT 8,L | DIGIT 8,M | DIGIT 8,E | DIGIT 7,G2 |  |
| Byte 10 | DIGIT 7,B | DIGIT 8,G1 | DIGIT 8,F | DIGIT 8,H | DIGIT 8,I | DIGIT 8,A1 | DIGIT 8,J | DIGIT 8,B |  |
| Byte 11 | DIGIT 6,B | DIGIT 7,G1 | DIGIT 7,F | DIGIT 7,H | DIGIT 7,A1 | DIGIT 7,I | DIGIT 7,A2 | DIGIT 7,J |  |