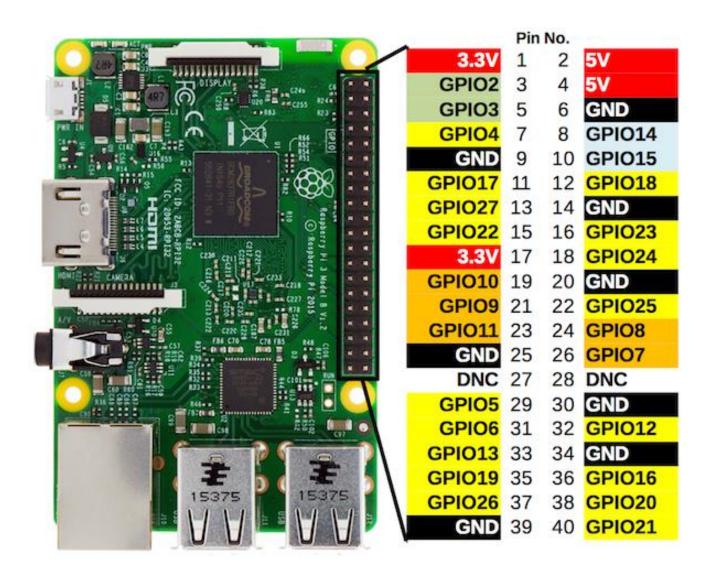


4 Byte 7 Segment LED Display

Fun with Raspberry Pi and Scratch

- Yashmith Reddy

4 Byte 7 Segment LED Display Pin connections





7 Segment LED Display – Pin info

Note: Refer next slide for the connected PIN info

7 Segment LED Display – Connected Pin info

| Segment | DP | G | F | E | D | С | В | A |
|---------|----|---|----|----|----|---|----|----|
| GPIO | 13 | 5 | 23 | 26 | 19 | 6 | 24 | 25 |

| Segment | D1 | D2 | D3 | D4 | |
|---------|----|----|----|----|--|
| GPIO | 12 | 16 | 20 | 21 | |

Each 7 Segment LED Display numbers and segments

| DIGIT TO DISPLAY | DP | g | f | е | d | С | b | а |
|---------------------|----|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 2 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 3 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| 4 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 5 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| 6 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 8 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |

Each 7 Segment LED Display numbers and segments

| DIGIT TO DISPLAY | Segments on |
|---------------------|---------------------|
| 0 | f, e, d, c, b, a |
| 1 | c, b |
| 2 | f, e, d, b, a |
| 3 | g, d, c, b, a |
| 4 | g, f, c, b |
| 5 | g, f, d, c, a |
| 6 | g, f, e, d, c, a |
| 7 | c, b, a |
| 8 | g, f, e, d, c, b, a |
| 9 | g, f, d, c, b, a |

Appendix

• Scratch code:

https://github.com/Yashmith-Reddy/myscratch/tree/main/4 Bytes 7 Seg Display

• https://pijaeducation.com/arduino/seven-segment/seven-segment-led-types-and-pin-config/

 https://pijaeducation.com/arduino/seven-segment/how-to-useseven-segment-display/

Thank You