

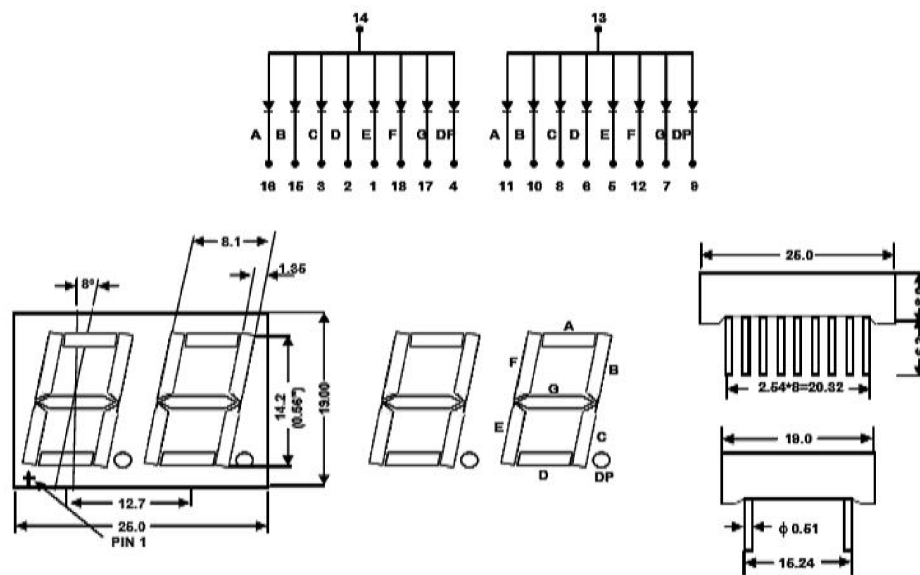
Seven-Segment Display Problem

Read the following datasheet of a 2-digit 7-segment display. If we want to show the number 22 (twenty two) on this display using a two-byte number connecting to all 16 pins of the display as shown below. What should that two-byte number be in hexadecimal? Note that to turn on the LED, the current must flow from Anode to Cathode, i.e., from Pins 13 and 14 with TTL High (State 1) to TTL Low (State 0). Note also that we omit Pins 4 and 9 which are used for the decimal points.

Segment Digit LED Display

DEVICE DIAGRAM

PIN		PIN		PIN		PIN	
1	Cathode E1	6	Cathode D2	11	Cathode A2	16	Cathode A1
2	Cathode D1	7	Cathode G2	12	Cathode F2	17	Cathode G1
3	Cathode C1	8	Cathode C2	13	Common Anode 2	18	Cathode F1
4	Cathode DP1	9	Cathode DP2	14	Common Anode 1		
5	Cathode E2	10	Cathode B2	15	Cathode B1		



	MSB							LSB	MSB								LSB
Bit	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	
Pin	18	17	16	15	14	13	12	11	10	8	7	6	5	3	2	1	

Your answer

Figure 1: Seven-Segment Display Datasheet

Implementation

Goal: Declare and assign the **string** variable **ans** with the correct two-byte hexadecimal value to display the number 22 on the seven-segment display.:

```
ans="0xa32f" # Replace with the correct two-byte hexadecimal value
```