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CS33

Discussion 1L

Homework 2

Approaching the problem:

1. This is a 3D array. Think of it as an array of 2D arrays.
2. To reach magic8ball[3][4], you would have to access the **third** 2D array
3. After accessing the 2D array, you would access the **fourth row** of that array

Solving the problem:

1. To access the third 2D array, you do 3\*8\*8 = 192. Add this 192 (c0 in hexadecimal) to the starting location of the 3D array (0x7fffffffe000).

0x7fffffffe000 + c0 = ‭7fffffffe0c0‬

1. To access the third row of the 2D array, you do 4\*8 = 32. Add this 32 (20 in hexadecimal) to the location obtained in the previous step (‭7fffffffe0c0).

‭7fffffffe0c0 + 20 = ‭7fffffffe0e0‬

1. Look for the address ‭7fffffffe0e0 in the code and decipher the characters using the ASCII table.

0x57 0x72 0x6f 0x6e 0x67 0x00 0x00 0x00



Wrong (with some null bytes)

The string that will be printed out is “Wrong”.