800. Similar RGB Color Premium



The red-green-blue color "#AABBCC" can be written as "#ABC" in shorthand.

For example, "#15c" is shorthand for the color "#1155cc".

The similarity between the two colors "#ABCDEF" and "#UWXYZ" is $-(AB - UV)^2 - (CD - WX)^2 - (EF - YZ)^2$.

Given a string color that follows the format "#ABCDEF", return a string represents the color that is most similar to the given color and has a shorthand (i.e., it can be represented as some "#XYZ").

Any answer which has the same highest similarity as the best answer will be accepted.

Example 1:

Input: color = "#09f166"

Output: "#11ee66"

Explanation:

The similarity is $-(0x09 - 0x11)^2 - (0xf1 - 0xee)^2 - (0x66 - 0x66)^2 = -64 - 9 - 0 = -73$. This is the highest among any shorthand color.

Example 2:

Input: color = "#4e3fe1"

Output: "#5544dd"

Constraints:

- color.length == 7
- color[0] == '#'
- color[i] is either digit or character in the range ['a', 'f'] for i > 0.

Seen this question in a real interview before? 1/5



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