

800. Similar RGB Color

Description

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 `"#UVWXYZ"` 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`.

