Paths Exercise

Luca Ezio Pozzoni

November 2021

Paths

A fitness-focused social network logs the paths walked by its users, and registers each path length. Users can rate a path logged by another users or by themselves. Therefore, each Path will have an avgRating from 1 to 10 depending on the average number of reviews it has obtained. When a user walks along a registered path, it gets points according to the following formula:

$$(avgRating + 2) * length$$

A special treatment is reserved for Hiking Paths, characterized by a significant elevation gain. For such paths, the elevation gain must be registered along with their length. Considering that these paths can be more difficult, the maximum rating has been raised to 15. Finally, the points are awarded according to an updated formula:

$$10 * length + height/100$$

Provide an implementation for the missing parts of the code, and try to answer to the form published on the chat.