

1. Code Question 1

Amazon is working on improving the performance of the Recently Viewed Items page. They want to implement the following functionality:

- If the item name is already on the Recently Viewed Items page, it is moved to the top without affecting the relative ordering of other items.
- If the item name is not on the Recently Viewed Items page, it is added at the top of the list.

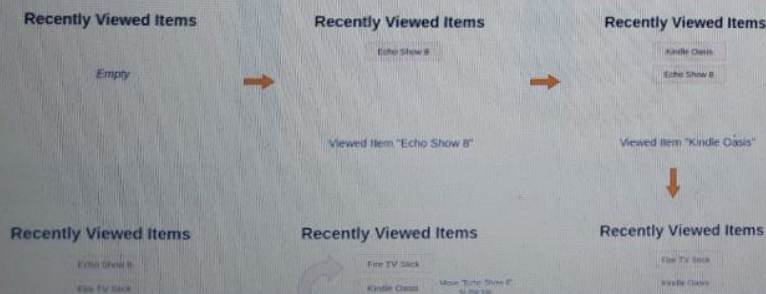
Starting with an empty Recently Viewed Items page, and given a list of items in the order they are viewed, return the resulting order of items on the page from top to bottom.

Note: Two items' names are only the same if each of their characters is exactly the same.

Example

`logs = ['Echo Show 8', 'Kindle Oasis', 'Fire TV Stick', 'Echo Show 8']`

Here's how the Recently Viewed Items page will change:



Language

C++20

Autocomplete Ready

Environment

```
1 > #include <bits/stdc++.h>...
9 /*
10  * Complete the 'recentlyViewed' function below.
11  *
12  * The function is expected to return a STRING_ARRAY.
13  * The function accepts STRING_ARRAY logs as parameter.
14  */
15
16 vector<string> recentlyViewed(vector<string> logs) {
17
18 }
19 > int main() ...
```

Test Results

Custom Input

Run Code

Run Tests

2. Code Question 2

Alexa is Amazon's virtual AI assistant. It makes it easy to set up your Alexa-enabled devices, listen to music, get weather updates, and much more. The team is working on a new feature that suggests days for camping based on the weather forecast.

According to a survey, a day is *ideal* for camping if the amount of rainfall has been *non-increasing* for the prior k days from the considered day, and will be *non-decreasing* for the following k days from the considered day. Given the predicted rainfall for the next n days, find all the ideal days. Formally, the day i is ideal if the following is true:

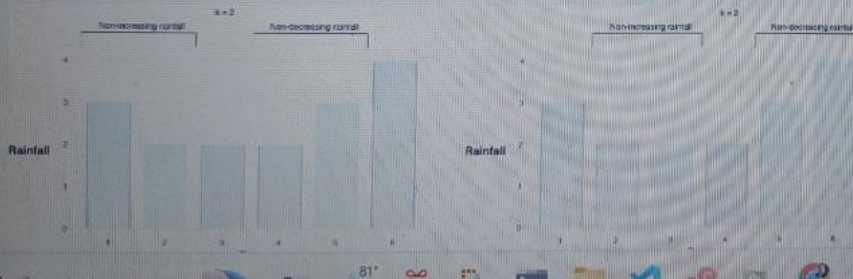
$$\text{day}[i-k] \geq \text{day}[i-k+1] \geq \dots \geq \text{day}[i-1] \geq \text{day}[i] \leq \text{day}[i+1] \leq \dots \leq \text{day}[i+k-1] \leq \text{day}[i+k]$$

Return the array of ideal days in ascending order. Note that the i^{th} element of the array represents the data for the day $i+1$. It is guaranteed that there is at least one ideal day.

Example

$\text{day} = [3, 2, 2, 2, 3, 4]$
 $k = 2$

For a day to be ideal, the amount of rainfall has to be non-increasing for the prior 2 days and non-decreasing for the following 2 days.



Language

C++20

Autocomplete Ready

Environment

```
1 > #include <bits/stdc++.h>...
9
10 /*
11 * Complete the 'predictDays' function below.
12 *
13 * The function is expected to return an INTEGER_ARRAY.
14 * The function accepts following parameters:
15 * 1. INTEGER_ARRAY day
16 * 2. INTEGER k
17 */
18
19 vector<int> predictDays(vector<int> day, int k) {
20
21
22
23 > int main() ...
```

Test Results

Custom Input

Run Code

Run

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