

22C:16 (CS:1210) Quiz 6

You have 20 minutes to complete this quiz.

1. Define a function called `setSubtraction` that takes two lists `L1` and `L2` as parameters. The function is required to return a new list containing all elements that are in `L1`, but not in `L2`. For example, it would be correct for the function call `setSubtraction([3, -4, -1, -7, 8], [1, 1, 3, 8])` to return `[-4, -1, -7]`. There is no constraint on the order of the elements in the returned list.

2. Define a function called `expand` that takes two lists – a list of words called `wordList` and a list of corresponding frequencies called `freqList` and returns an “expanded” list in which each word appears as many times as its frequency. For example, if `wordList` is `["hi", "hello", "prediction"]` and `freqList` is `[3, 2, 1]`, then the function should return `["hi", "hi", "hi", "hello", "hello", "prediction"]`. The “expanded” list should contain words in order, i.e., since `"hi"` appears first in `wordList`, all copies of `"hi"` should appear first in the “expanded” list, etc. You can assume that `freqList` contains positive integers only.
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