

12768 - 電機資結 2020 HW3 Tree Anagrams

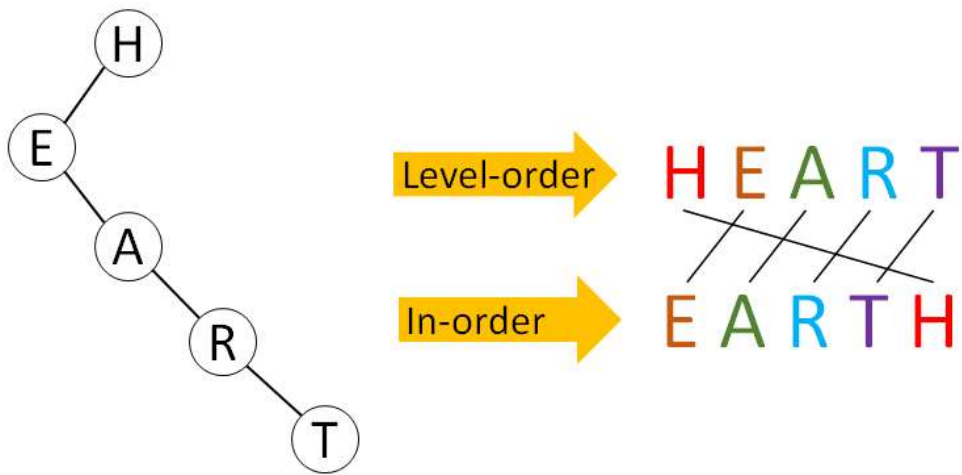
Description

Anagrams is "變位字" in Chinese

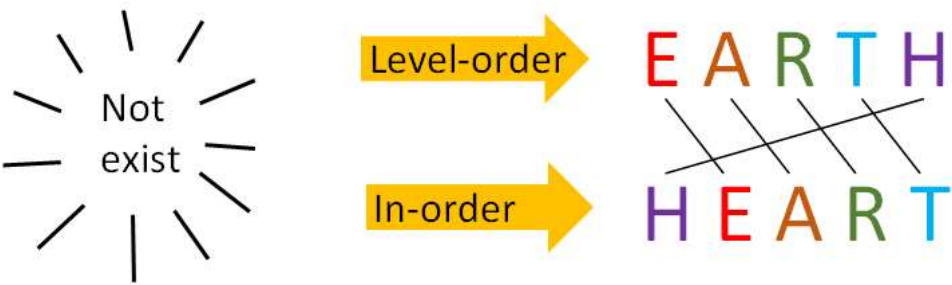
HEART
EARTH



Our "Tree Anagrams" definition is as follows:



Not All Anagrams are Valid Trees. For example, if we want "EARTH" to be the level-order sequence and "HEART" to be the in-order sequence, the tree does not exist.



Input

5
abdcef
adbecf
abecd
ebdac
adbce
dacbe
abdecfhg
efbhcgad
acbdegf
ecdfagb

Number of sequence pairs

Level-order sequence
In-order sequence

(A letter is used exactly once in a sequence)

Output

5
abdcef
adbecf
abecd
ebdac
adbce
dacbe
abdecfhg
efbhcgad
acbdegf
ecdfagb

Same as the input

Permutation sequence

Does the tree exist? Yes or No.

Sample Input

Download (data:text/plain;charset=utf-8,5%0D%0Aabdcef%0D%0Aadbecf%0D%0Aabecd%0D%0Aebdac%0D%0Aadbce%0D%0Adacbe%0D%0Aabdecfhg%0D%0Aefbhcgad%0D%0Acbdegf%0D%0Aecdfagb%0D%0A)

5
abdcef
adbecf
abecd
ebdac
adbce
dacbe
abdecfhg
efbhcgad
acbdegf
ecdfagb

Sample Output

Download (data:text/plain;charset=utf-8,5%0D%0Aabdcef%0D%0Aadbecf%200-2-1-4-3-5%20Yes%0D%0Aabecd%0D%0Aebdac%203-1-0-4-2%20No%0D%0Aadbce%0D%0Adacbe%201-0-3-2-4%20Yes%0D%0Aabdecfhg%0D%0Aefbhcgad%206-2-7-0-4-1-3-5%20Yes%0D%0Acbdegf%0D%0Aecdfagb%204-1-6-2-0-5-3%20No)

```
5
abdcef
adbecf 0-2-1-4-3-5 Yes
abecd
ebdac 3-1-0-4-2 No
adbce
dacbe 1-0-3-2-4 Yes
abdecfhg
efbhcgad 6-2-7-0-4-1-3-5 Yes
acbdegf
ecdfigb 4-1-6-2-0-5-3 No
```

Tags

Discuss