

[like, mango, man, go
i, sam, sung, samsung]

Given a string **A** and a dictionary of n words **B**, find out if A can be segmented into a space-separated sequence of dictionary words.

Note: From the dictionary **B** each word can be taken any number of times and in any order.

Example 1:

Input:

$n = 12$

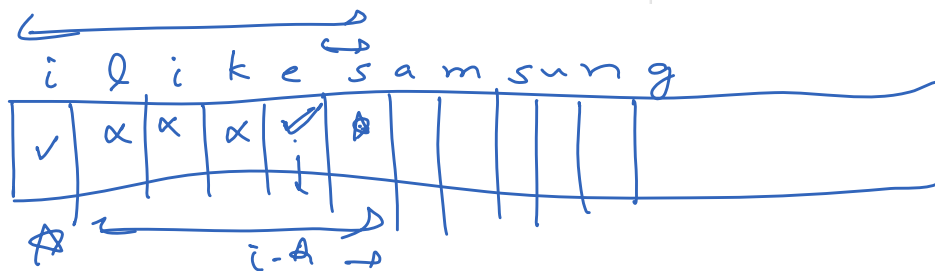
$B = \{ "i", "like", "sam", "sung", "samsung", "mobile", "ice", "cream", "icecream", "man", "go", "mango" \}$

$A = "ilike"$

i like samsung
i-like-sam-sung

9:01-9:11

i
like
sam
mango
sung



Design a k-stack in samsung

int



9:18-9:24

Push 10, 0

Push 20, 1

Push 30, 2

Push 40, 1

Push 50, 1

Top 0

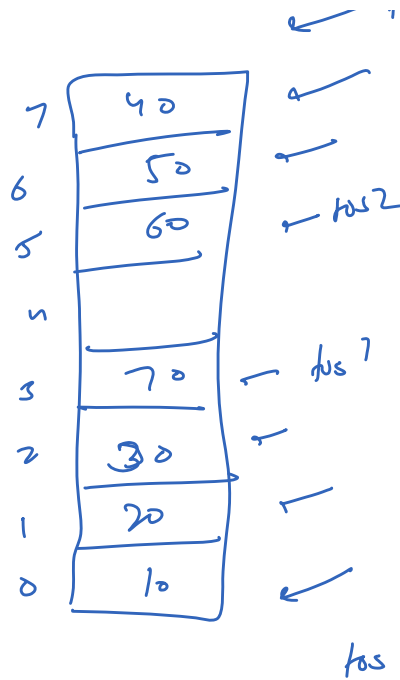
Top 2

Top 1

← top2

Pop1

Push 56 7 1



Pop 1

Push 1 10

Push 1 20

Push 1 30

Push 2 40

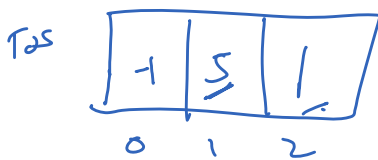
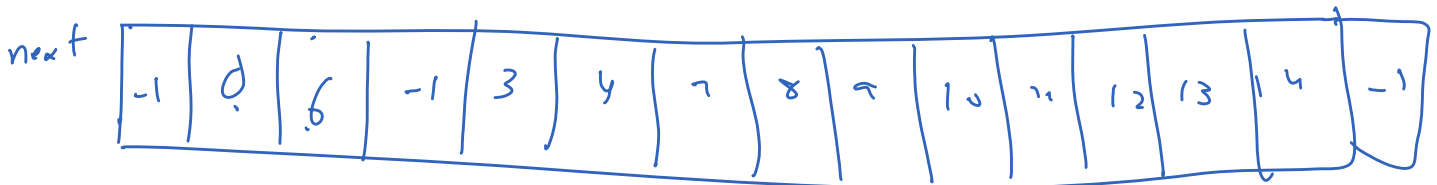
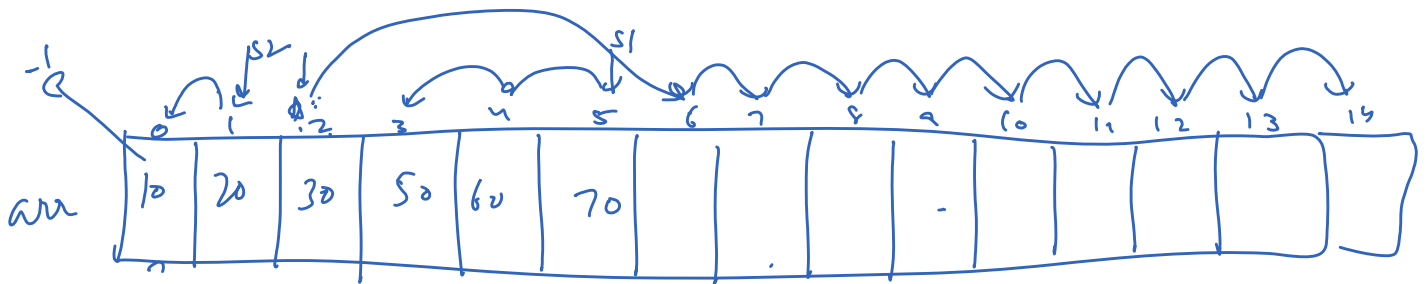
Push 2 50

Push 3 60

Push 1 70

Push 1 80

top 1



free = 0, 7, 6

Push 10, 2

— 20, 2

— 30, 2

Push 50, 1

— 60, 1

— 70, 1

int curr = free; ✓

// remove from free

free = next[free]; ✓

// add to current

next[curr] = top[m]; ✓

top[m] = curr;

// receive value

arr[curr] = x;

Pop 2

art

arts

and

ant

10:38 - 10:48

```
class Trie {
    class Node {
        boolean eow = false;
        Node[] children = new Node[26];
    }
    Node root;
    public Trie() {
```

un
 ant
 act
 act
 sea
 see
 seen

```

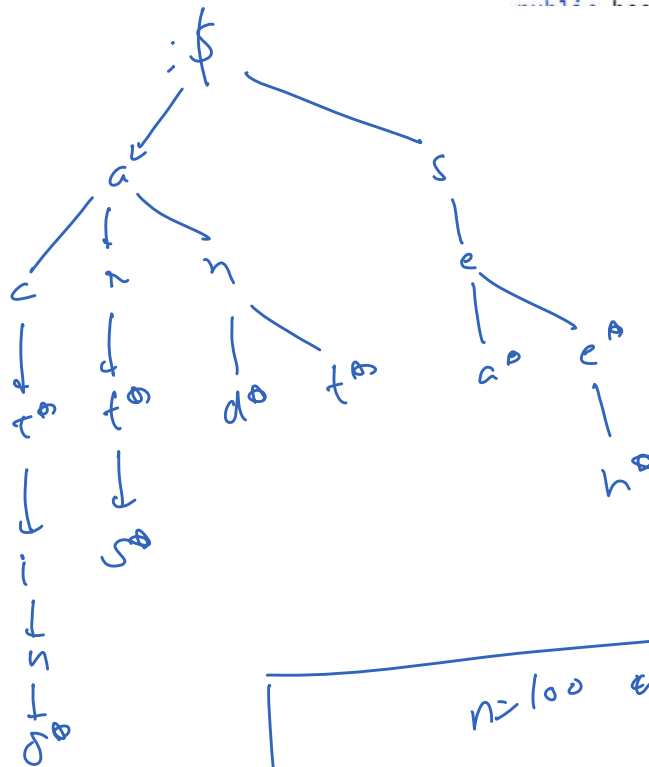
Node root;
public Trie() {
    root = new Node();
}

public void insert(String word) {
    Node node = root;
    for(char ch: word.toCharArray()){
        if(node.children[ch - 'a'] == null){
            node.children[ch - 'a'] = new Node();
        }
        node = node.children[ch - 'a'];
    }

    node.eow = true;
}

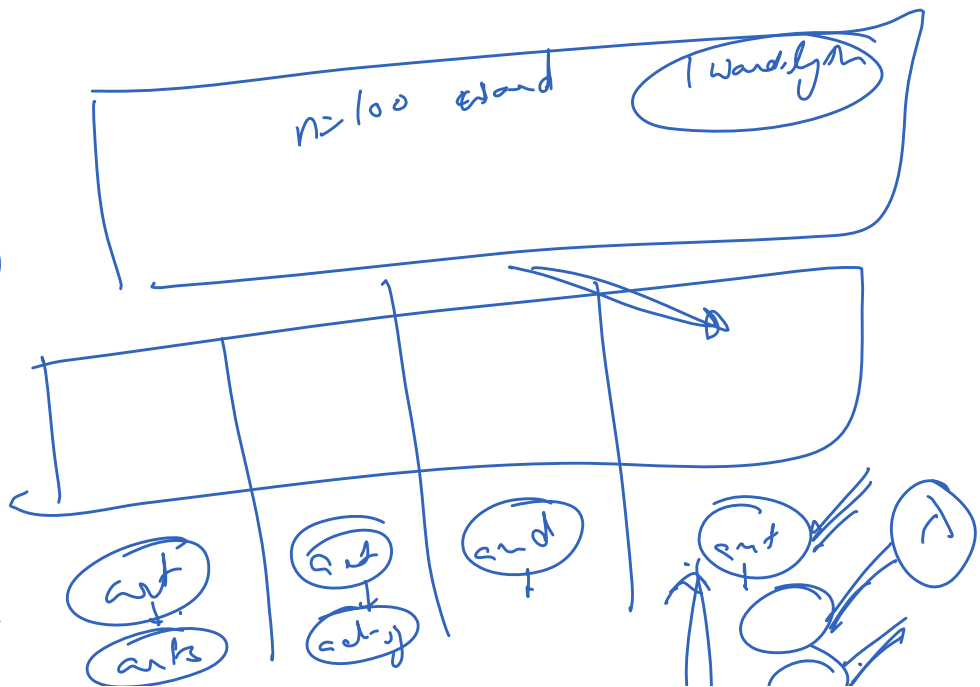
public boolean search(String word) {

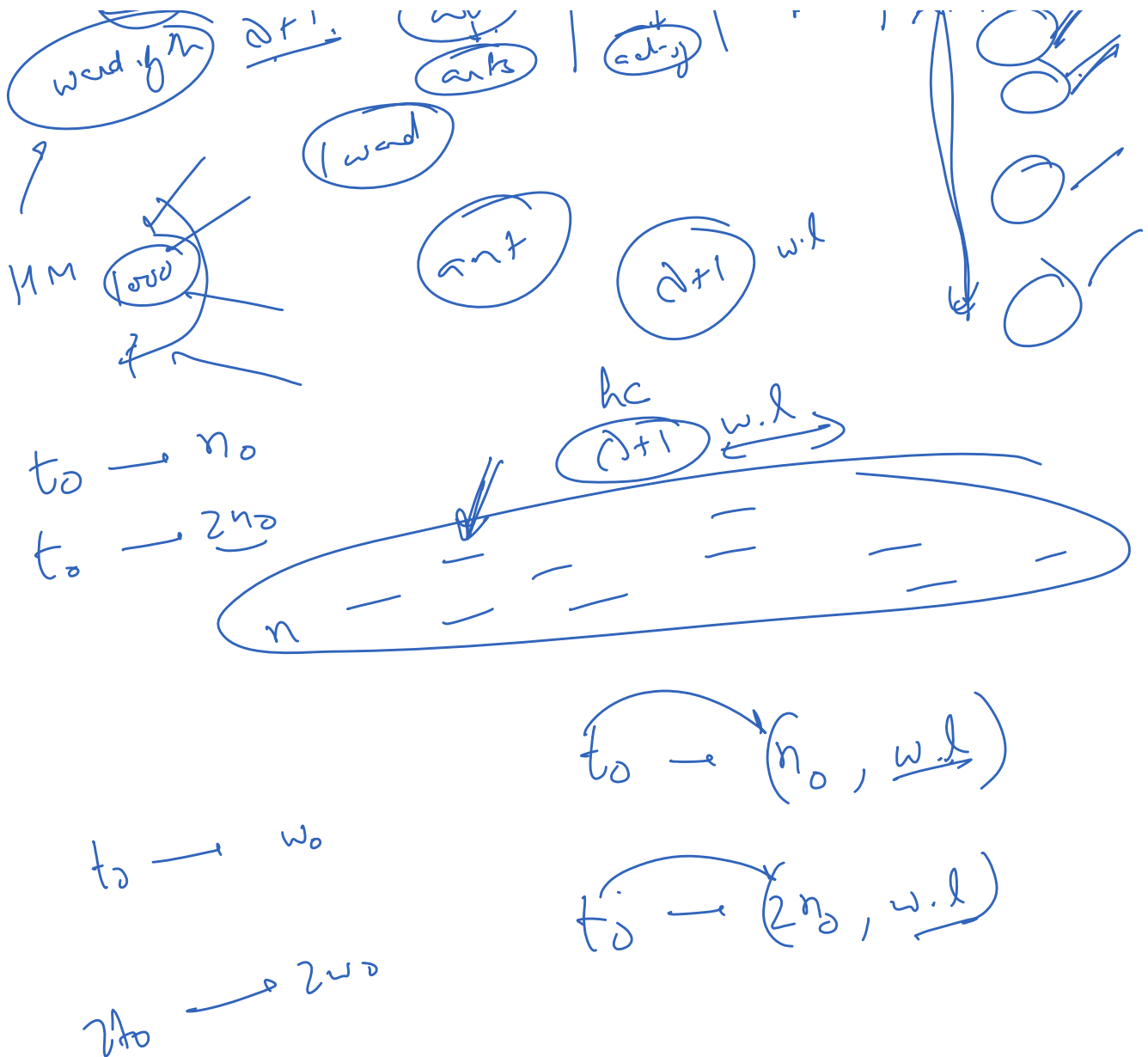
```



ant
 act

equals
 hc
 word if n
 0+1





211. Design Add and Search Words Data Structure

Medium 5446 286 Add to List Share

11:15 - 11:25

Design a data structure that supports adding new words and finding if a string matches any previously added string.

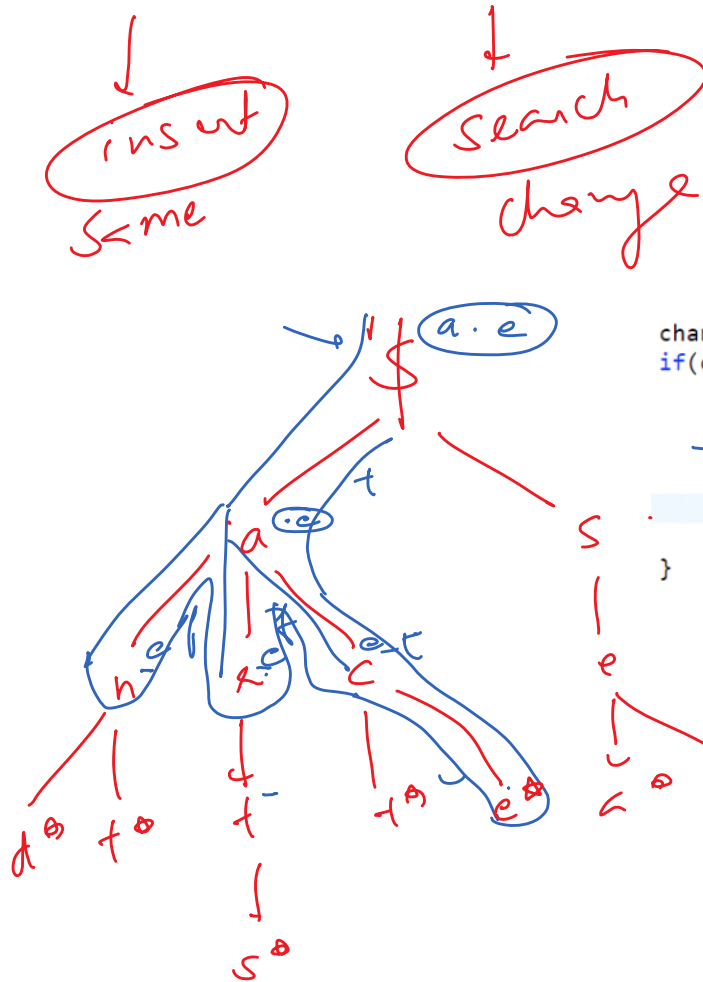
Implement the `WordDictionary` class:

- `WordDictionary()` Initializes the object.

11:15 - 11:25

Design a data structure that supports adding new words and finding if a string matches any previously added string.

- `WordDictionary()` Initializes the object.
- `void addWord(word)` Adds `word` to the data structure, it can be matched later.
- `bool search(word)` Returns `true` if there is any string in the data structure that matches `word` or `false` otherwise. `word` may contain dots `'.'` where dots can be matched with any letter.



```
char ch = word.charAt(idx);
if(ch != '.'){
    Node child = node.children[ch - 'a'];
    if(child == null){
        return false;
    } else {
        return helper(word, idx + 1, child);
    }
}
```

and
ant
arts
act
sea
seen

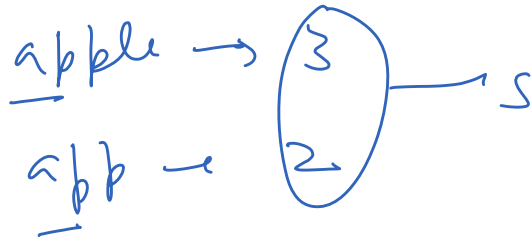
11:47 - 12:00

```
["MapSum", "insert", "sum", "insert", "sum"]
[[], ["apple", 3], ["ap"], ["app", 2], ["ap"]]
```

```
[null, null, 3, null, 5]
```

ap

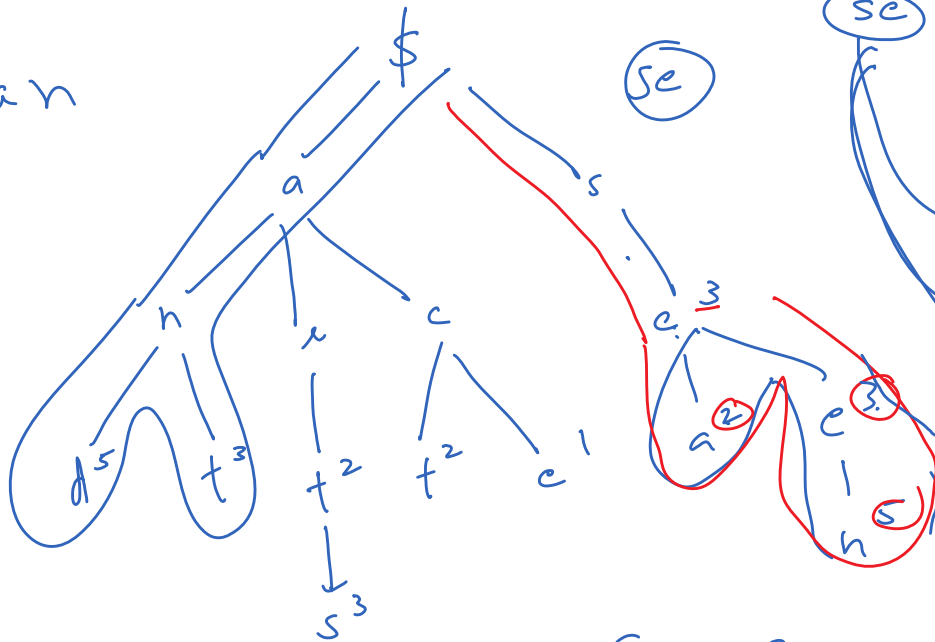
[null, null, 3, null, 5]



ap



an

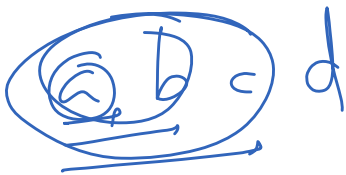


se

se

se

~~se → 3~~
 se → 2
 se → 3
 se → 5



~~se → 2~~
~~se → 3~~
~~se → 5~~

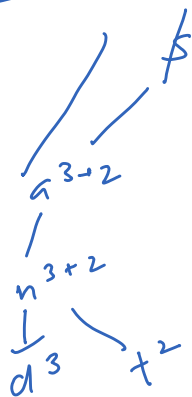
se → 3

~~an → 3~~

and → 3

~~Q54~~ s

a.



and - s

ant - 2

sh