


ase	deg	mee	agg	died	ccc
-----	-----	-----	-----	------	-----

o/p \Rightarrow mee, agg

Pattern = abb

a	b
↓	↓
1	2

for

word = pggp

↓
not match

pattern = abbc

a	b	c
↓	↓	↓
1	2	1

Approach \rightarrow mapping

Pattern = abb

abc	deg	mee	agg	died	ccc
-----	-----	-----	-----	------	-----

also
map
this
with
abb

word = abc ! = abb
 $\begin{matrix} \wedge & \wedge & \wedge \\ a & b & c \end{matrix}$

word = deg ! = abb
 $\begin{matrix} \wedge & \wedge & \wedge \\ a & b & c \end{matrix}$

word = mee = abb =

word = agg = abb =

word = died ! = abb
 $\begin{matrix} \wedge & \wedge & \wedge \\ a & b & c \end{matrix}$

word = ccc ! = abb
 $\begin{matrix} \wedge & \wedge & \wedge \\ a & a & a \end{matrix}$

Pattern \rightarrow 'a'

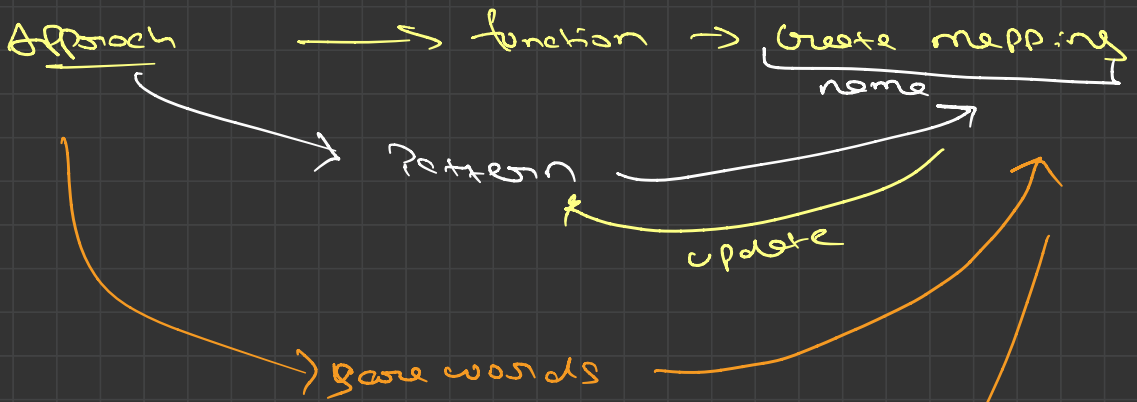
'a'	'b'	'c'
-----	-----	-----

word \Rightarrow a = a

word = b = a

word = c = a

All are
output



update &
match
↓
Yes → print

'psb' → create mapping()

↓ change
'abb'

psps → abbe

pspp → abba

```

class Solution {
public:
    // this function normalise all the words and pattern into a similar format
    // so that we can compare them and find the solution
    void createMapping(string& s){
        // find mapping
        char start = 'a';
        char mapping[300] = {0};

        for(auto ch : s){
            if(mapping[ch] == 0){
                mapping[ch] = start;
                start++;
            }
        }

        // update the sting with mapp
        for(int i = 0; i < s.length(); i++){
            char ch = s[i];
            s[i] = mapping[ch];
        }
    }

    vector<string> findAndReplacePattern(vector<string>& words, string pattern) {
        // output store karayege
        vector<string> ans;

        // firstly -> normalise the pattern
        createMapping(pattern);

        // sare words ko mapp krna hai
        for(string s : words){
            string tempString = s;

            // normalise the tempString
            createMapping(tempString);
            cout << tempString << " ";

            if(tempString == pattern){
                // it means that 's' wali string was valid ans;
                ans.push_back(s); // s is the main string
            }
        }
        return ans;
    }
};

```