

Word Break in C++

```
#include <iostream>
#include <unordered_set>
#include <string>

using namespace std;

void wordBreak(string str, string ans,
unordered_set<string>& dict) {
    if (str.length() == 0) {
        cout << ans << endl;
        return;
    }

    for (int i = 0; i < str.length(); i++) {
        string left = str.substr(0, i + 1);
        if (dict.find(left) != dict.end()) {
            string right = str.substr(i + 1);
            wordBreak(right, ans + left + " ",
dict);
        }
    }
}

int main() {
    int n = 5;
    unordered_set<string> dict = {"microsoft",
"hiring", "at", "kolkata"};
    string sentence = "microsoft hiring";

    wordBreak(sentence, "", dict);

    return 0;
}
```

Dry Run Table:

Call	str	ans	Lo op i	left = str.substr(0 , i+1)	left in dict ?	Action Taken
1	microsoft hiring	""	0	m	✗	skip
1	microsoft hiring	""	1	mi	✗	skip
1	microsoft hiring	""	2	mic	✗	skip
1	microsoft hiring	""	3	micr	✗	skip
1	microsoft hiring	""	4	micro	✗	skip
1	microsoft hiring	""	5	micros	✗	skip
1	microsoft hiring	""	6	microso	✗	skip
1	microsoft hiring	""	7	microsof	✗	skip
1	microsoft hiring	""	8	microsoft	✓	Recurse with str=hiring, ans=microso ft
2	hiring	microsoft	0	h	✗	skip
2	hiring	microsoft	1	hi	✗	skip
2	hiring	microsoft	2	hir	✗	skip
2	hiring	microsoft	3	hiri	✗	skip
2	hiring	microsoft	4	hirin	✗	skip
2	hiring	microsoft	5	hiring	✓	Recurse with str="", ans=microso ft hiring
3	""	microsoft hiring	-	—	—	Print: microsoft hiring

✓ Final Output:

microsoft hiring

Output:-	
microsoft hiring	