

[All Tracks](#) > [Algorithms](#) > [Sorting](#) > Problem

13

LIVE EVENTS

## Monk and Suffix Sort

Attempted by: 3214 / Accuracy: 91% / Maximum Score: 20 / ★★★★★☆ 33 Votes

Tag(s): Algorithms, Easy, Sorting, Sorting

**PROBLEM****EDITORIAL****MY SUBMISSIONS**

Monk loves to play games. On his birthday, his friend gifted him a string  $S$ . Monk and his friend started playing a new game called as Suffix Game. In Suffix Game, Monk's friend will ask him lexicographically  $k^{th}$  smallest suffix of the string  $S$ . Monk wants to eat the cake first so he asked you to play the game.

**Input Format:**First line contains a string  $S$  ( $1 \leq |S| \leq 25$ ) and an integer  $k$  ( $1 \leq k \leq |S|$ ).**Output Format:**Print the lexicographically  $k^{th}$  smallest suffix of the string  $S$ .**Note:**

Those who are not familiar with suffix and lexicographical order, can read about it from <https://en.wikipedia.org/wiki/Suffix> and [https://en.wikipedia.org/wiki/Lexicographical\\_order](https://en.wikipedia.org/wiki/Lexicographical_order).

**SAMPLE INPUT**

aacb 3

**SAMPLE OUTPUT**

b

**Explanation**

All the suffices of the string are:

aacb  
acb  
cb  
b

After sorting the order of the suffices will be:

aacb  
acb  
b  
cb $3^{rd}$  smallest suffix will be  $b$ .**Time Limit:** 1.0 sec(s) for each input file.**Memory Limit:** 256 MB

**Source Limit:** 1024 KB**Marking Scheme:** Marks are awarded when all the testcases pass.**Allowed Languages:** Bash, C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Swift-4.1, TypeScript, Visual Basic

13

LIVE EVENTS

## CODE EDITOR

Enter your code or [Upload your code](#) as file.

Save

C++14 (g++ 5.4.0)



```
7  int main(){
8      string str;
9      int k;
10     cin>>str>>k;
11     int length = str.length();
12     string suff[length];
13
14     // Generating suffices (string ending with this)
15     for(int i=0;i<length;i++){
16         string temp;
17         for(int j=i;j<length;j++){
18             temp += str[j];
19         }
20         suff[i] = temp;
21     }
22
23     for(int i=0;i<length;i++){
24         for(int j=0;j<length-i-1;j++){
25             if(suff[j] > suff[j+1]){
26                 string swap = suff[j];
27                 suff[j] = suff[j+1];
28                 suff[j+1] = swap;
29             }
30         }
31     }
32
33     // Sorting the array
```

7:9 vscode

☒ Provide custom input

COMPILE &amp; TEST

SUBMIT

Submission ID: 40267759 / 1 second ago

**RESULT:** AcceptedScore  
20.0Time (sec)  
1.53088Memory (KiB)  
64Language  
C++14

?

Input	Result	Time (sec)	Memory (KiB)	Score	Your Output	Correct Output	Diff
Input #1	✔	0.10278	64	4			
Input #2	✔	0.102393	64	4			
Input #3	✔	0.101567	64	4			
Input #4	✔	0.102371	64	4			
Input #5	✔	0.101607	64	4			
Input #6	✔	0.102022	64	4			
Input #7	✔	0.101596	64	4			
Input #8	✔	0.101704	64	4			
Input #9	✔	0.102214	64	8			
Input #10	✔	0.102555	64	10			
Input #11	✔	0.101593	64	10			
Input #12	✔	0.102397	64	10			
Input #13	✔	0.102704	64	10			
Input #14	✔	0.101635	64	10			
Input #15	✔	0.101746	64	10			

Compilation Log

Compilation Successful.

13

LIVE EVENTS

Your Rating:

View all comments

