

5606. Smallest String With A Given Numeric Value

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The **numeric value** of a **lowercase character** is defined as its position (1-indexed) in the alphabet, so the numeric value of **a** is 1, the numeric value of **b** is 2, the numeric value of **c** is 3, and so on.

The **numeric value** of a **string** consisting of lowercase characters is defined as the sum of its characters' numeric values. For example, the numeric value of the string **"abc"** is equal to $1 + 2 + 3 = 6$.

You are given two integers **n** and **k**. Return the **lexicographically smallest string** with **length** equal to **n** and **numeric value** equal to **k**.

Note that a string **x** is lexicographically smaller than string **y** if **x** comes before **y** in dictionary order, that is, either **x** is a prefix of **y**, or if **i** is the first position such that **x[i] != y[i]**, then **x[i]** comes before **y[i]** in alphabetic order.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: n = 3, k = 27

Output: "aay"

Explanation: The numeric value of the string is $1 + 1 + 25 = 27$, and it is the smallest string with such a value and length.

Example 2:

Input: n = 5, k = 73

Output: "aaszz"

Constraints:

- $1 \leq n \leq 10^5$
- $n \leq k \leq 26 * n$

JavaScript

```
1 /**
2  * @param {number} n
3  * @param {number} k
4  * @return {string}
5  */
6 const getSmallestString = (n, k) => {
7   let s = "";
8   for (let i = 0; i < n; i++) {
9     s += 'a';
10  }
11  let res = s.split("");
12  for (let i = n - 1; ~i; i--) {
13    k -= i;
14    if (k >= 0) {
15      if (k >= 26) {
16        res[i] = 'z';
17        k -= 26;
18      } else {
19        let c = String.fromCharCode(k + 97 - 1);
20        res[i] = c;
21        k -= res[i].charCodeAt() - 'a'.charCodeAt() + 1;
22      }
23    }
24  }
25  break;
26 }
```

```
27         k += i;  
28     }  
29     return res.join("");  
30 };
```

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