## 1) Strings Repetition

You just need to take a string and a integer as an input and repeat the string upto the count given as in integer.

Sample Test Case:

Hello

2

Output:

HelloHello

2) Given a string s, remove duplicate letters so that every letter appears once and only once. You must make sure your result is **the smallest in lexicographical order** among all possible results

```
Input: s = "bcabc"
```

Output: "abc"

Input: s = "cbacdcbc"

Output: "acdb"

- 3) A magical string s consists of only '1' and '2' and obeys the following rules:
  - The string s is magical because concatenating the number of contiguous occurrences of characters '1' and '2' generates the string s itself.

The first few elements of s is s = "1221121221221121122.....". If we group the consecutive 1's and 2's in s, it will be "1 22 11 2 1 22 1 22 11 2 11 22 ....." and the occurrences of 1's or 2's in each group are "1 2 2 1 1 2 1 2 2 1 2 2 .....". You can see that the occurrence sequence is s itself.

Given an integer n, return the number of 1's in the first n number in the magical string s.

```
Input: n = 6
```

Output: 3

**Explanation:** The first 6 elements of magical string s is "122112" and it contains three 1's, so return 3.

Input: n = 1

Output: 1

4) Given a list of non-negative integers nums, arrange them such that they form the largest number and return it. Since the result may be very large, so you need to return a string instead of an integer.

```
Input: nums = [10,2]
```

Output: "210"

**Input:** nums = [3, 30, 34, 5, 9]

Output: "9534330"

5) Given a string s and an integer k, return the length of the longest substring of s such that the frequency of each character in this substring is greater than or equal to k.

```
Input: s = "aaabb", k = 3
```

Output: 3

Explanation: The longest substring is "aaa", as 'a' is repeated 3 times.

Input: s = "ababbc", k = 2

Output: 5

**Explanation:** The longest substring is "ababb", as 'a' is repeated 2

times and 'b' is repeated 3 times.