1. Given a string 'S', sort the characters based on the frequency(highest and lowest) and print the resultant string.(Note:If the frequency of different character is same then sort based on alphabetical order).
Input Size : 1 <= S <= 100000
Sample Testcases :
INPUT:-
aabbba
OUTPUT:-
aaabbb

2.Given two strings S1 and S2,display 'yes' if given two strings are complementary otherwise display 'no'. If we join alphabets of both the strings we should get all 26 capital letters exactly once, then only we can call them as complementary.
Sample Testcase :
INPUT
ABDCFGIJKLMNOPQUVWXYZ
EHRST
OUTPUT
yes

3.Given a string, print the run-length encoded output.
Input Size : N <= 100000
Sample Testcase :
INPUT
aaab
OUTPUT
A3b1

4.Given 2 arrays print 'yes' if they are mirror images of each other,otherwise 'no'.
Input Size : N <= 1000000
Sample Testcase :
INPUT
4

1 2 3 4
4 3 2 1
OUTPUT
yes

5.You are provided with a string ‘s’. Your task is to reverse the string using stack Data Structure.

Input Description:
You are given a string ‘s’.

Output Description:
Print the reverse string

```
Sample Input :
i am jsb
Sample Output :
jsb am i
```

6.Given a string S of length N, print all permutations of the string in a separate line.
Input Size : 1 <= N <= 100000
Sample Testcases :
INPUT
123
OUTPUT
123
231
321
213
312
132

7.Given a number N, print all prime numbers less than N(in ascending order).
Input Size : 1 <= N <= 100000
Sample Testcase :
INPUT
10
OUTPUT
2 3 5 7

8.Given a number 'N' print the sum of each digit to the power of number of digits in given input.
Example :
Input => 1234
=> (1 ^ 4) + (2 ^ 4) + (3 ^ 4) + (4 ^ 4)
=> 1 + 16 + 81 + 256
Output => 354
N <=100000000000
Sample Testcase :
INPUT
1234
OUTPUT
354

9.Given a sentence S.check whether it is in camelcase.print 'yes' if it is in camelcase otherwise print 'no'.
input size : |s| <= 100000
Sample Testcase :
INPUT
CodekataChallenge
OUTPUT
Yes

10.Given a range[L,R], print the sum of all the odd numbers within the range(inclusive of L and R).
Sample Testcase:
INPUT
5 10
OUTPUT
21

11.Given a number N, print the sum of the squares of its digits.
Input Size : 1 <= N <= 1000000000000000000
Sample Testcase :
INPUT
19

OUTPUT
82

12.How many possible ways are to shuffle given number of playing cards?.
Input Size : |N| <= 1000000
Sample Testcase :
INPUT
7
OUTPUT
5040

13.Given a number N print the right-angled triangle with the top level having N 1's followed by each level with is one 1 lesser.
Input Size : N <= 1000
Sample Testcase :
INPUT
3
OUTPUT
1 1 1
1 1
1

14.Given a number N, find the sum of prime numbers that end with 3 from 2 to N.
Input Size : N <= 100000
Sample Testcase :
INPUT
5
OUTPUT
3

15.Pyramid Pattern in Python

Expected o/p:-
Enter the row size for the pattern: 5
```
    *
   * * *
  * * * * *
 * * * * * * *
* * * * * * * * *
```