Problems based on Recursion - 9

Assignment Questions

PW SKILLS

Q1 - You are given a string. Your task is to divide the string into palindromic substrings. Print all such partitions.

Example

Input: banana

Output

[b, a, n, a, n, a]

[b, a, n, ana]

[b, a, nan, a]

[b, ana, n, a]

[b, anana]

Input: farm

Output

[f, a, r, m]

Q2 - A string is called beautiful if is an even length string consisting of only stars('*') and dashes('-'). Further the number of stars in the first half of the string should be equal to the number of stars in the second half of the string. Given a number n, print all the beautiful strings of length 2 * n.

Example

Input: 2

Output

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-*-*

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Input: 1

Output

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Q3 - A string is called beautiful if it consists of only stars('*') and dashes('-'). Further the number of stars in the first half of the string should be equal to the number of stars in the second half of the string. Given a number n, print all the beautiful strings of length n. If the value of n is odd, the middle value can be either '*' or '-'

Example

Input: 2

Output

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Input: 3
Output
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Q4 - Problem Count the number of substrings having same first and last characters

Input : s = "pqrpq"
Output : 7

Explanation:
There are 15 substrings of "pqrpq"
p, pq, pqr, pqrp, pqrpq, q, qr, qrp
qrpq, r, rp, rpq, p, pq, q
Out of the above substrings, there
are 7 substrings which have same first and last character: p, pqrp, q, qrpq,
r, p and q.

Input : s = "sss"
Output : 6

Q5 - You are given a string s. All the characters in s are distinct. Your task is to generate all the strings that contain the characters of 's' in increasing order.

Example
Input
sam
Output
a
am
ams
as
m
ms
s

Input
fa
output
a
af
f