

Question - 1

Print Pattern

Write a C program that takes a number from the user and prints the following pattern.

```
4
A
AB
ABC
ABCD
ABC
AB
A
```

Question - 2

Count Occurrences

Write a program to find the occurrences of a given word in a given text. Your program should take inputs from STDIN and output the answer to STDOUT. Your program should take two inputs; word and text. Then, produce the output in the format below.

If any of the inputs are missing, you should display a message as "Wrong Input".

```
I
I hear and I forget, I see and I remember, I do and I understand.
The occurrences of "I" in the text are 6.
```

Question - 3

Equal or Not?

Given two strings, the task is to check whether both of the strings can be made equal by copying any character of the string with its adjacent character. Note that this operation can be performed any number of times. The two strings should be read from the user and the user will provide it as a single line input separated by a space. You need to give the output as "Yes" or "No" depending on whether they can be made equal or not. Note that the strings will contain only characters from the alphabet.

Examples:

```
abc def
No
```

As all the characters in both the strings are different.
So, there is no way they can be made equal.

```
abc fac
Yes
```

```
str1 = "abc" -> "aac"
str2 = "fac" -> "aac"
```