

1] Given a text and a wildcard pattern, implement wildcard pattern matching algorithm that finds if wildcard pattern is matched with text. The matching should cover the entire text (not matching should cover the entire text (not partial text)).

The wildcard pattern can include the characters '?' and '*' '?' – matches any single character '*' – Matches any sequence of characters (including the empty sequence)

2] Two strings of equal length will be given. Print all the adjacent pairs which are not equal.

Input: asdfghij and adsfgijh

Output: sd-ds, hij-ijh

3] Find the result subtraction, multiplication, division of two integers using + operator.

Input: 6 and 4

output: addition addition $6+4 = 10$, subtraction subtraction $6+(-4) = 2$,

multiplicati multiplication = 24, division division = 1

Input : -8 and -4

Output: addition addition $-8+(-4) = -12$, subtraction subtraction $(-8)+(-4) = -12$, multiplicati multiplication = 32, division division = 2

4] Given a sentence of string, in that remove the palindrome words and print the remaining.

Input: He did a good deed

Output: He good

Input: Hari speaks malayalam

Output: Hari speaks

5] Given two dates, find total number of days between them.

Input: dt1 = {10, 2, 2014} dt2 = {10, 3, 2015}

Output: 393 dt1 represents "10-Feb-2014" and dt2 represents "10-Mar-2015"

The difference is 365 + 28

Input: dt1 = {10, 2, 2000} dt2 = {10, 3, 2000} Output: 29

Input: dt1 = {10, 2, 2000} dt2 = {10, 2, 2000} Output: 0

Input: dt1 = {1, 2, 2000}; dt2 = {1, 2, 2004}; Output: 1461

6] Mr. Robot is making a website, in which there is a tab to create a password. As other

websites, there are rules so that the password gets complex and none can predict the password for another. So he gave some rules like:

- At least one numeric digit
- At Least one Small/Lowercase Letter
- At Least one Capital/Uppercase Letter
- Must not have space
- Must not have slash (/)
- At least 6 characters

If someone inputs an invalid password, the code prints: "Invalid password, try again". Otherwise, it prints: "password valid".

Input Format:

A line with a given string as a password

Output Format:

If someone inputs an invalid password, the code prints: "Invalid password, try again". Otherwise, it prints: "password valid", without the quotation marks.

Constraints:

Number of character in the given string $\leq 10^9$

Sample input 1:

abjnlL09

Sample output 1:

password valid

Sample input 2:

jjnaskpk

Sample output 2:

Invalid password, try again

7]Given an even number (greater than 2), return two prime numbers whose sum will be equal to given number? There are several combinations possible. Print only first such pair.

NOTE: A solution will always exist, read Goldbach's conjecture. Also, solve the problem in linear time complexity, i.e., $O(n)$.

Input:

The first line contains T, the number of test cases.

The following T lines consist of a number each, for which we'll find two prime numbers.

Note: The number would always be an even number.

Output:

For every test case print two prime numbers space separated, such that the smaller number appears first. Answer for each test case must be in a new line.

Constraints:

$$1 \leq T \leq 70$$

$$1 \leq N \leq 10000$$

Example:

Input:

5

74

1024

66

8

9990

Output:

3 71

3 1021

5 61

3 5

17 9973