

- Write a program to take read array of numbers, find the distance between two same elements of a array.

Eg: [2,8,1,7,5,2,9,6,1,8,7,5] if input is 8, Then output is 7

- Write a program to take input string, and replace the ASCII in place of vowels and print the string.

Eg: Input - Kartheek

output is- K97rth101101k

- Create a Student class with properties as sRollNo,sName,sBranch,Marks (internalMarks, externalMarks, credits). Create 4 Students with 6 subjects and 2labs and find the percentage of marks and print in table form with sRollNo, sName, %marks
- Write a program to take input string, replace all characters by its next consecutive alphabet.

Eg: If abc then bcd

if AcG then BdH

if ApPIE then BqQmF

- Write a program to Take input string and print the character with its frequency.

Eg: Mississippi then

M-1

i-4

s-4

p-2

- Write a program to take input as integer array, and print all the perfect squares.

Following are the tasks:

- 1) A input string contains lower, upper case letters and spaces.

Sort the string so that all lower cases are at the beginning,
spaces in the middle and upper cases at the end.

Eg: Who Is That Person ->hoshaterson WITP

- 2)Find the largest positive sequence in an array -

Eg - [1,2,-3,2,3,4,-6,1,2,3,4,5,-8,5,6]

Output is: 5->[1,2,3,4,5]

- 3)Write a program to test whether a string and all strings that can be made using the characters of that string are palindrome or not.

Eg: KaKa, lilir, mamad

- 4) Write a program to find distance between two given elements from a integer array.

Eg- [1,9,2,6,4,11,15,13,3,8,10]

If e1=6 and e2=3 then distance=4

- Reading character and integers and how to read strings.

a-z -> 97-122

A-Z->65-90

0-9 -> 48-56

Use above for conversions

- b) Write a C program to take input string that is combination of integers, alphabets. Print their ascii's .
- C) Write a c program to take input string and convert into upper case and lowd) Write a c program to take input string and print all the escape characters and alphabets separately from a given string

Eg: Le\ndi \and kar\theek

output: \n \a \t

Ledi nd karheeker case

- Write a program to take 'n' students names, and sort the lengths of strings in ascending order.
- B) Write a program to count no.of vowels for a given string.
- C) Write a program to take input string, and print the substrings which are consecutive
- a) Write a program to take input string and print in alphabetical order.
- b) Write a program to take array of strings and find out next preceding character from all strings for a given character.
- c) Write a program to take input string, and pick all 'n' charactered substring and check whether they are palindromes or not.

- a) Write a program to take input string and delete vowels from that string and print rest of string.
- b) Write a program to take input string sequence, and reverse the words of sentence.
- c) Write a program to take input string and take two input positions. Pick the sub string and reverse in that positions and print complete string.
- a) Write a program to take input string, and print the frequencies of each character.
- b) Write a program to take input string sequence, and print words in backward direction and reversing them.
- c) Write a program to take input string and remove the consecutive similar characters.
- a) Write a program to take input string, and print in this fashion:

Lendi

Lend

Len

Le

L

- b) Write a program which take set of strings till we enter the string "end" and sort the strings in sorting order whose having more vowels.
- c) Write a program to take input string, and replace with next precedence character whenever character repeats and so on till last occurrence.

- a) Write a program to print all the prime numbers for a given array of integers.
- b) Write a program to print all even numbers in even positions and odds numbers in odd positions
- Today's task:
 - a) Write a program to take a integer array and take a input integer 'X' and key 'K' and replace all all X's in array with K
 - b) Write a program to take input character array, and print all the characters which are repeated more than once.
- a) Write a program to take array of integers, and find out the perfect squares and print them.
- b) Write a program to take integer array, and find the distance between two same elements. Print all the distances, if number repeats.
- a) Write a program to take array of strings and pick out the longest sub string in all strings.
- b) Write a program to find out all the numbers whose sum of digits is a prime number for a given array of numbers
- Write a java program to take employee.txt that contains records of 10 employees(eld,eName, dept, desgination ,salary,)
find out the following:
 - a) Write a program to print all the employees whose salary is greater than 17000.
 - b) Write a program to add increments to employees with 2000, 3000, 5000 for asst.prof, assoc.prof, prof to existing salary.
 - c) Write a program to change designation of the employees as assoc.prof and proffesor if their salary is above 35000 and 50000.

- Take a map with key as branch and value as list of students, they are different branches in the college. List out first five toppers of the college.
- Write a java program to find the nth prime number
- Write a java program to retrieve the strings whose vowels count is greater than consonants count
- Write a java program to read integer array and pick all the doublets and triplets from it
- Write a java program to get all slices from a string which are consecutive to each other.
- 1) Write a program to read a paragraph, and count all the occurrences of each word.
- 2) Write a program to find the frequency of each character for a given string.
- 3) Write a program to read input as a sentence and append Z to the left for every word which ends with letter 'e'.
- 4) Write a program to read list of integers and pick all the numbers whose sum of the digits up to last fold is 9.
- 5) A file is given which consists of 3 columns : date, city and temperature.
For ex:

Date City Temperature

09-11-2015 Delhi 45

09-11-2015 Bangalore 24

09-11-2015 Ranchi 28

and it should support following type of queries:

A) What is the temperature of Bangalore on 9th November?

B) Give 5 hottest/coldest cities name on 9th November

- 6) Find the second most repeating number in an array without using extra storage.

E.g.. [6,8,1,2,6,3,6,2,3,2,6]

- 7) Given a Integer, find the maximum number that can be formed from the digits.

Input : 8754365

output : 8765543

- 8) Find the longest running positive sequence in an array -

Eg - [1,2,-3,2,3,4,-6,1,2,3,4,5,-8,5,6]

It should return 5, with start index : 1 and ends at 5

- 9) Write a program to test whether string s2 is obtained by rotating the string s1 by 2 places.

e.g S1="eagles" S2="elesag" return true

S1="quality" S2="lityqua" return false

- 10) Write a program to find duplicate elements in array and total count of duplicate elements.

eg. arr={5,3,4,6,7,5,3,2,1}

Duplicate elements:- 5,3

Total duplicate count:- 2

- 11) Given a string, find the largest repetitive sequence.

Ex: abcdefbcd – bcd, banana – ana

- 11) Rearrange characters in a string so that no character repeats twice.

Input: aaabc

Output: abaca

Input: aa

Output: No valid output

Input: aaaabc

Output: No valid output

- Write a program for generating all the possible combination of a given character.

Example:-

Input: {a,b,c}

output: {a,b,c,ab,ac,ca,ba,cb,bc,abc,bca,cab,cba,acb,bac}

- Write a program to accept two strings and print characters which are not present in first string.

Example: 1 string: apple

2 string: aeroplane

output: ro

- Write a program to take array of integers and do following: a) insert element at beginning, middle at some given location, and element at last position. b) delete elements as same above all positions c) search as same as all positions above

- Write a program to take integer array and read also a integer to check it's nth occurrence in the above array and print it's location.
- a) Take a input as lower or upper case character 'ch', and add 'n' units to that to get 'ch+n' th character.(Rule is should not use decision statements, loops and ternary operator.)
- Write a program to print the grades of student when input is given between $1 \leq k \leq 100$, ≥ 80 is A grade , ≥ 60 & < 80 is B grade, ≥ 40 & < 60 is C grade, ≥ 20 & < 40 is D grade, ≤ 20 is E grade. (Without using conditional statement , loops and conditional operator)
- Read input as character with upper case or lower case, output should print either vowel or not. Using conditional operator.
- Take input as either centigrade or Fahrenheit, output should be temperature conversion using conditional operator. E.g. Input = 98c or 98C and 98f or 98F, output should be temperature conversion either in Celsius or Fahrenheit
- Read three sides of a triangle and then prints 1 if it is a right angle triangle otherwise 0. Without using any conditional statements and loops including ternary operator.
- Write a program to take input as two vowels and print all the consonants between them.
- Print the following series using only one loop

1

1 1

1 1 1

1 1 1 1

1 1 1 1 1

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

- Take input as reading of aggregate of different students till we enter zero, then find first highest and second highest aggregates without arrays
- Write a program to read an integer 'n' and then print the largest fibonacci number less than 'n'.
- Write a program to read an integer 'n' and check whether given number is fibonacci or not
- Write a c program to take input integer, and print even numbers sum and odd numbers sum.
- Write a program to take input integer 'n' and find the fold of number 'n', such that for every mth fold if it returns prime print that, otherwise print final fold
- Write a program to take input number and print its equivalent words. Eg: n= 489, output is: four eight nine
- Write a program to take input integer, and print the following pattern depending upon 'n' (n=5)

A

BC

DEF

GHIJ

KLMNO

- Take a input as total money in integer, and give me output as money in least number of notes. Eg. Input=13895, then output is: 13-1000 rupee notes, 1-500 rupee note, 3-100 rupee note, 1-50 rupee note, 4-10 rupee note, 1-5 rupee note
- Write a program to print following pattern for a value 'n'. (n=5)

1

11

111

1111

11111

1111

111

11

1

1

12

123

1234

12345

1234

123

12

1

- Take a input string and print as following:

L

LE

LEN

LEND

LENDI

LEND

LEN

LE

L

LENDI

LEND

LEN

LE

L

LE

LEN

LEND

LENDI

- Task 1:

1

1 1 1

1 1 1 1 1

1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1

- Task2:

1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1

1 1 1 1 1

1 1 1

1

1 1 1

1 1 1 1 1

1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1

- Task-3:

1

1 1

1 1

1 1

1 1

1 1

1

- Task-4:

A

B C

D E

F G

H

- Write a program to declare, read and print string various ways.
- Write a program to read a string and print string till space occurs
- Write a program to read a string and traverse the string till character repeats and print till then.

- Write a program to read string which includes \n and \t , output should be the actions done on those escape sequences for that string
- Write a program to read two strings and print the common characters from them.
- Write a program to read String, and delete the characters in even places and print.
- Write a program to read String, and print reverse of string.
- Write a program to read string, and print in alphabetical order.
- Write a c program to read string and check whether it is palindrome or not.
- Write a program to read 5 student names and print the largest string in length.
- Write a program to read student name and marks, print the marks of student whose name is longest.
- Write a program to read a string sequence and capitalize all the first letters of each word.
- Write a program to reads a integer number into a string variable and then prints 20 times of that integer.
- Write a program to take a string like sentence, and repeat the words of sentence but not sentence and print the sentence
- Write a program to read a string that contains combination of integers ,floating numbers and characters, then seperate all aside and print with comma separator
- Write a C program to sort words of a sentence with their length
- Write a program to read string and print the characters count as output

- Write a program to take string as input, print the characters in sorted order by their frequency, if frequency repeats, sort by their ascii value. Frequency is number of time a character repeats.
- Write a program to take input as a number and do all the following: 1) Print the sum of evens and sum of odds. 2) Print the sum of even index numbers and odd indexed numbers. 3) Print the sum of even indexed even numbers and odd indexed odd numbers.

Eg. Input- 147289, Output- 1) 14, 17. 2) 15, 16. 3) 6, 8

- Write a program to take string, and print the characters and their set containing positions of the character.
- Write a program to read string and print frequency immediate after character.
- Write a program to reverse the sub string from a particular position with no of characters given.

Eg. Input- engineering, position-3, no.of.chars-4 Output: eng(eeni)ring

- Write a program to take integer array and print the longest positive sequence. Eg. [1,-3,5,1,-1,8,9,5,7,0], then output is 8,9,5,7
- Write a program to take a string as input, and find the distance between two same characters if character is given from first index.
- Given an array, find the first repeated number.
- Write a program to read array and find out the values which are repeated odd number of times and even number of times

- Write a program to take a integer array and find the distance between two unique elements. Eg. 1,3,7,8,2,6,4 then if x=3, y=6, then distance is 3.
- Write a program to read array of integers, and find out the all the prime numbers which are less than the greatest even element in the array.
- Write a program to read integer array and print which number count appears more number of times and print those numbers. If count is same print all occurrences
- Take a file contains employee details with eid, ename, desgn, dept. Search the employee with eid, print the details of employee if found, otherwise throw an exception EmployeeNotFoundException
- Create a thread named Lottery with rupees 15000, 10000, 5000 respectively. Four people participating into lottery game, first person who enters should get highest, second one gets next, third one gets next , other people should throw exception named LotteryTimeoutException
- Write a program to take a file containing data, create a thread called counter, and generate three counters to count words, characters and lines
- Write a program to take character array and generate two words, one word is combination of even characters and other is combination odd characters, finally concatenate the words.

Eg. student then , word1= suet, word2= tdn, then output is suettdn

- Take a two strings and check whether they are anagram to each other. Anagram means string contains existence of another string
- Take a integer array and get all the fibonacci numbers
- Read a string sequence, and get me the word which is longest in length. Eg. Hello iam kartheek chandra patnaik uriti, output: kartheek
- Take a string and find the string which is highest with no of vowels. In the above example, kartheek and patnaik are having more vowels.

- Write a program to take string and capitalize first letters of all words. Eg. I am very fascinate about java, then output: I Am Very Fascinatr About Java
- Write a program to read a character and print nearest vowel to that.
- Task:

A manufacturer of sweets has started production of a new type of sweet called rock. Rock comes

in sticks composed of one-centimetre-long segments, some of which are sweet, and the rest are

sour. Before sale, the rock is broken up into smaller pieces by splitting it at the connections of

some segments.

Today's children are very particular about what they eat, and they will only buy a piece of rock if

it contains more sweet segments than sour ones. Try to determine the total length of rock which

can be sold after breaking up the rock in the best possible way.

Input

The input begins with the integer t , the number of test cases. Then t test cases follow.

For each test case, the first line of input contains one integer N - the length of the stick in

centimetres ($1 \leq N \leq 200$). The next line is a sequence of N characters '0' or '1', describing the

segments of the stick from the left end to the right end ('0' denotes a sour segment, '1' - a sweet

one).

Output

For each test case output a line with a single integer: the total length of rock that can be sold after

breaking up the rock in the best possible way.

Example

Sample input:

2

15

100110001010001

16

0010111101100000

Sample output:

9

13

- Write a program to read a paragraph, and 1) print count of total number of articles, 2) print each article count 3) if 'a' and 'an' occurs in consecutively, then remove 'an' but not viceversa.
- Write a program to take input as paragraph, and capitalize the words whenever '.' preceeds.

- 1) Write a C program to take input as integer into string variable, and print 15 times of that integer.
- 2) Write a C program to take input as float into string variable, and print 15 times of that float value.
- 3) Write a C program to take input as float number into string variable and then print "Yes" if its integer portion is exactly same as decimal portion otherwise print "No".
- Today task what we gave: Take a itemset of super market, (customerID, customerName, itemName, price) then do the following: 1) Find out the item which has more sales. 2) Find out the item which has more income. 3) Find out the best customer for the market. (Dataset attached to mail).
- Write a program to read n strings, and pick the common characters in all.
- Check biggest number from n numbers without array.
- Take a number n, and find the biggest digit in that number. Eg. n=187 then 8 is big number
- Print lowest and highest character from given n characters.
- Take input as number and convert into words. Eg. n= 125 then, One Two Five
- Take input as number, and find sum of factorials of each digit. And check that number is same as given input, if so then print it is strong number. Eg. n=145 then, Strong Number bcoz, $1!+4!+5!=145$
- Take input as a character, and print the nth preceding character. Eg. ch= 'a', n=9 then, ch='j' and if ch='x' n=5 then, ch='c'.
- Take a given number as n, and convert into binary number. Eg. n=9, then 1001 (decimal to octal).
- Take a given number as n, and convert into octal number. Eg. n= 130, then 202 is answer

- Take input as floating point number, then reverse the decimal value. Eg. n=124.567, then 124.765 is right answer
- Take input as floating point number, output should be round, floor and ceil value.
- Take input as multiple strings and remove common characters from them and print all strings again.
- Take input as String and print all the capital letters, small letters, numbers and symbols in different sets. Eg. UkCp.18@gMail.cOm then output is: [U,C,M,O], [k,p,g,a,l,l, c,m],[1,8], [.,@]
- Take input as two integer arrays and print all the distinct elements by merging them.
- Task 1: Create a telephone directory with <K,V> as name, details of person(name, phone, email). Then find out all the employee phone numbers whose name start with a sample string. Eg. Input is "ka", then output is: all the names that start with ka and their phone numbers printed in ascending order.
- Task 2: Create a Map with K,V as Name of person, Set of hobbies. Given a input as hobby, list out the persons who are acquiring those hobbies.
- Task 3: Create a Map with K,V as Student Branch, List of students(sid, name, agg, gender). Then find the following: a) Find out all the girl first toppers from each branch. b) Find out all the department wise top 2 students one from men and other from women. c) Find out the pass percentage of all branches.(>40% are failed).
- Task 4: Create a Map with K,V as ShopId, Map<item,sales_percentage>. List out the shops in ascending order of their sales percentage when a item is given as input.
- Task 5: Create a Map with K,V as BankName, Map<AccNo, List of transactions>. Transactions are of positive and negative amounts +ves are

amount deposited and -ves are amount withdrawn. Find out the bank whose deposited amount is highest.

- Task 6: Create a Map with K,V as StudentId, story paragraph. Find out the following: 1) Print studentId and their stories upto 75 words. 2) Find out article counts of each student story paragraph. 3) Change the paragraph of each student with Capitalize the first letter when full stop appears and keep space after comma whenever comma appears.
- Task 7: Create a Map with K,V as rankcharacter, string. Read a string and store into Map with key as most appeared character and value as rank of characters and print the map.
- Task 8: Create a List of mails (emailId, message) in the mail inbox, Find out the emailId whose message contains more number of special symbols like(&,@,#,!,?,,) etc.
- Task 9: Create a Map with K,V as College, Map<StudentId, List of 3 section marks>. If cutoff marks of section-1,2,3 are 11,13,8. Then list out the students from different colleges who qualified for written test. Print the studentId, college name, List of marks.
- Task 10: Create a List of sentences as List<String>, create a paragraph from above list by merging each object from the list. Conditions are when articles appears keep the fullstop before that article. Also change to new line when more than 15 words are formed.
- Take input as string and print rank of given character in the each line of a paragraph and print that line.no and rank
- Take input as string, and get the longest consecutive character sequence without repetitions
- Read a string and remove all the special characters and symbols from it

- Take input as integer array , and find out the nth biggest and mth lowest number from that. Eg: 1, 7, 2, 9, 12, 17, 20, 34, 21 and n= 3, m=4 then biggest is: 20 and lowest is: 9
- Take input as multiple strings, and arrange the strings in the order by the following constraints: 1) sum with highest ascii count 2) highest character existence
- Marks Management System:=====>
- A file contains each student subject wise marks, with Regd.No, SubjectCode, SubjectName, InternalMarks, ExternalMarks, Credits as attributes. Each student of different department subject marks will be in each line in the above format attributes, So find out the following:
 - 1) Write a program to take input as department name, and generate Regd.No, Sub1,Sub2,...,Subn, percentage, Credits.
 - 2) Write a program to take input as department name, and generate the above order in highest to lowest.
 - 3) Write a program to take input as department name and Map<SubjectName, FacultyName> of Faculty names who dealt that subject, then generate the following: SubName, FacultyName, Total appeared, No.Of.Passed, No.of.Failed, PassPercentage, count of (≥ 60 && < 70), count of (≥ 70), highest mark.
 - 4) Write a program to take input as data file, and generate the following: DepartmentName, No.of.students, No.of.passes, No.of.failed, pass percentage.
 - 5) Write a program to take input as data file, generate department wise top three students like: Regd.No, DEPT, Percentage.
 - 6) Write a program to take input as department name, and generate .number of students who failed in n,n+1,n+k where n starts 1...k.

- 7) Write a program to take input as percentage, and generate the list of students(Regd.no, Department, Agg.Percentage, Credits).
- 8) Write a program to take input as Map<Regd.No, Name> and department, then generate Regd.No, Name, Sub1,Sub2,...Subn, percentage, Credits.
- Write a program to take input string and print largest continuous sub string. Eg. abmnopxyz then, output is: mnop
- Write a program to take input as integer array, and find out the element which is nth biggest perfect square.
- If input is amount in rupees, then find out the 1000's, 100's, 10's and 1's count. Eg. 18755 then output is 18, 7, 5, 5
- Take a String "html" is decoded as "pbut" then write a program to decode "ajax".
- Take input as number print the pattern of the below kind:

[19:16, 8/26/2016] Kartheek Sir: Input is 18489 then,

18489

1848

184

18

1

(Only Number not string)

- Write a program to read a string and replace all spaces with new line.

- Write a program to take input as number, and print number with its place. Eg: 1375 then output is, 1000+300+70+5
- Write a program to read a number, and print the largest number in it, without converting into string, Eg. 1398 then, output is 9831
- Write a program to take input as String, and print characters when both uppercase and lowercase there in string. Eg. ElephAntlasiS then output is eais
- Write a program to take array of strings, sort the strings according to the position of given character in the strings. Eg. Input character is :a and input strings are :apple, jeans, ear, locate then, output is : locate, jeans, ear, apple. (4,3,2,1)
- Write a program to take input as String, and remove i+1th character from each word, where i starts from 0 for zeroth word and print that string. Eg. Hello this is kartheek, then output is: ello tis is karheek
- Write a program to take input as integer array and print all the odd primes from that. Eg. 2, 13, 9, 17, 23, 27, 31 then output is: 13, 17, 23, 31
- Write a program to read string, and count no of alphabets, symbols and numerics Eg. ukcp_18@gmail.com then output is: 12, 3
- Write a program to read string, and find out the biggest number from that and print. Eg. He5 i34s 41her2o of t22he na87ti43on. Then output is: 87
- Write a program to read a string using a pointer and print number of articles it contain.
- Write a program to read integer array using pointer, and print all the composite number from that.
- Write a program to read integer array, and pick out all number which is highest divisor.

- Write a program to take string array and sort strings in ascending order using compareTo method
- Write a program to take string array and print anagrams strings from that.
- Write a program to take paragraph and place \n whenever new line appears and \t whenever tab space appears.
- Write a program to paragraph and remove duplicate words.
- Write a program to take input as string array, and delete mid character from odd length word and append character ch in the middle for even length words.
- Tasks: Take input as string and do the following:
 - 1) If input is mississippi then m1i4s4p1.
 - 2) If input is mississippi then m1i1s2i1s2i1p1i1.
 - 3) If input is mississippi then m1i1s1s2i2s3s4i3p1i4