



[Home](#) » [Practice\(Extcontest\)](#) » Buy1-Get1

Buy1-Get1

Problem Code: **BUY1GET1**

Submit



One day Alice visited Byteland to purchase jewels for her upcoming wedding anniversary.

In Byteland, every Jewelry shop has their own discount methods to attract the customers. One discount method called **Buy1-Get1** caught Alice's attention. That is, Alice buys one jewel, then she can get one additional jewel with the same color without charge by **Buy1-Get1**.

Alice lists the needed jewels as a string **S**, each letter denotes one jewel, and the same letters denote the same colors of jewels, and the different letters denote the different colors of jewels. The cost of each jewel is **1**. Your task is to calculate the minimum cost for getting all the jewels Alice listed.

Input

The first line of input contains a single line **T**, which represents the number of test cases. Then **T** lines will follow, and each contains a string **S**, which represents the jewels Alice needed.

Output

Output the minimum cost for each test case.

Constraints

$1 \leq T \leq 100$

$1 \leq |S| \leq 200$, where **|S|** represents the length of the string **S**.

The string **S** is case sensitive, and will contain only English characters in the range **[a-z]**, **[A-Z]**.

Sample

Input :

```
4
SSSS
SSAS
sa
s
```

Output :

```
2
3
2
1
```

Explanation

In the first sample case, Alice needs **4** jewel of color **s**. One of the optimal way is the following:

Buy the first **s** with cost **1**, and she can get the second **s** without charge. Then buy the third **s** with cost **1**, and she can get the last **s** without charge. In this case, she get **4** jewels with only cost **2**.

In the second sample case, Alice needs **3** jewels of color **s** and **1** jewel of color **a**. One of the optimal way is the following:

Buy the second **s** with cost **1**, and she can get the last **s** without charge. Then buy the **a** and the first **s** with cost **2**. In this case, she get **4** jewels with only cost **3**.

In the third and fourth sample cases, she cannot save her money by using **Buy1-Get1**.

All submissions for this problem are available.

Author:	khad_adm
Tester:	6* laycourse
Editorial:	https://discuss.codechef.com/problems/BUY1GET1
Tags:	ad-hoc , cakewalk , feb13 , khad_adm
Date Added:	4-09-2012
Time Limit:	1 secs
Source Limit:	50000 Bytes
Languages:	CPP14, C, JAVA, PYTH 3.6, PYTH, CS2, ADA, PYP3, TEXT, PAS fpc, RUBY, PHP, NODEJS, GO, TCL, HASK, PERL, SCALA, BASH, JS, PAS gpc, BF, LISP sbcl, CLOJ, LUA, D, CAML, ASM, FORT, FS, LISP clisp, SCM guile, PERL6, CLPS, WSPC, ERL, ICK, NICE, PRLG, ICON, PIKE, SCM qobi, ST, NEM

Submit

Comments ►

My Submissions

All Submissions

Successful Submissions



[CodeChef is a competitive programming community.](#)

[About CodeChef](#) | [Contact Us](#)

The time now is: 10:05:20 PM
Your IP: 157.47.70.41

CodeChef uses SPOJ © by [Sphere Research Labs](#)

In order to report copyright violations of any kind, send in an email to copyright@codechef.com

CodeChef - A Platform for Aspiring Programmers

CodeChef was created as a platform to help programmers make it big in the world of **algorithms**, **computer programming**, and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and two smaller programming challenges at the middle and end of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

Practice Section - A Place to hone your 'Computer Programming Skills'

Try your hand at one of our many practice problems and submit your solution in the language of your choice. Our **programming contest** judge accepts solutions in over 55+ programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef.

Compete - Monthly Programming Contests, Cook-off and Lunchtime

Here is where you can show off your **computer programming skills**. Take part in our 10 days long monthly coding contest and the shorter format Cook-off and Lunchtime **coding contests**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to INR 20,000 (for Indian Community), \$700 (for Global Community) and lots more CodeChef goodies up for grabs.

Programming Tools

[Online IDE](#)

[Upcoming Coding Contests](#)

[Contest Hosting](#)

[Problem Setting](#)

[CodeChef Tutorials](#)

[CodeChef Wiki](#)

Practice Problems

[Easy](#)

[Medium](#)

[Hard](#)

[Challenge](#)

[Peer](#)

[School](#)

[FAQ's](#)

Initiatives

[Go for Gold](#)

[CodeChef for Schools](#)

[College Chapters](#)

[CodeChef for Business](#)

Policy

[Terms of Service](#)

[Privacy Policy](#)

[Refund Policy](#)

[Code of Conduct](#)

[Bug Bounty Program](#)