

## 1.The sum

Write a programs that calculate the sum of an given set of number

### Input:

The first line is the amount of test case

The second line: the first value indicate how many numbers will be added, after that all value will be count as the numbers that will be added

### Output:

For each case print out the summed of each cases

### Sample Input:

```
5
5 1 2 3 4 5
7 10 20 30 40 50 60 70
3 10 20 30
3 40 50 60
9 1 1 1 1 1 1 1 1 1
```

### Sample Output:

```
15
280
60
150
9
```

## 2.URL

Write a programs that takes the input that the users enter and display it as a url link **using strcat()**

### **Input:**

A single word not longer than 10 characters

### **Output:**

A url link

### **Sample Input1:**

google

### **Sample Output1:**

www.google.com

Search: google

Before

Length: 5

After

Length: 5

### **Sample Input2:**

youtube

### **Sample Output2:**

www.youtube.com

Search: google

Length: 5

### 3. Above Average

#### Input:

The first line of standard input contains an integer  $1 \leq C \leq 50$ , the number of test cases.  $C$  data sets follow. Each data set begins with an integer,  $N$ , the number of people in the class ( $1 \leq N \leq 1000$ ).  $N$  integers follow, separated by spaces or newlines, each giving the final grade (an integer between 0 and 100) of a student in the class.

#### Output:

For each case you are to output a line giving the percentage of students whose grade is above average, rounded to exactly 3 decimal places.

#### Sample Input:

```
5
5 50 50 70 80 100
7 100 95 90 80 70 60 50
3 70 90 80
3 70 90 81
9 100 99 98 97 96 95 94 93 91
```

#### Sample Output:

```
40.000%
57.143%
33.333%
66.667%
55.556%
```

## 4. Seven Wonders

Seven Wonders is a card drafting game in which players build structures to earn points. The player who ends with the most points wins. One winning strategy is to focus on building scientific structures. There are three types of scientific structure cards: Tablet ('T'), Compass ('C'), and Gear ('G'). For each type of cards, a player earns a number of points that is equal to the squared number of that type of cards played. Additionally, for each set of three different scientific cards, a player scores 7 points.

For example, if a player plays 3 Tablet cards, 2 Compass cards and 1 Gear card, she gets  $3^2 + 2^2 + 1^2 + 7 = 21$  points.

### Input:

The input has a single string with no more than 50 characters. The string contains only letters 'T', 'C' or 'G', which denote the scientific cards a player has played in a Seven Wonders game.

### Output:

Output the number of scientific points the player earns.

#### Sample Input 1:

TCGTTC

#### Sample Output1:

21

#### Sample Input 3:

TTCCGG

#### Sample Output3:

26

#### Sample Input 2:

CCC

#### Sample Output 2:

9

## Extra.Hangman

Hangman is a word-guessing game that can be played by two people. Player 1 thinks of a word consisting of  $n$  letters. Player 2 then attempts to discover the word by making a sequence of letter guesses. For each letter guessed by Player 2:

- If the letter occurs one or more times in the word, Player 2 does not lose any attempt.
- If the letter does not occur in the word, Player 1 loses an attempt. Player 2 can guess only 10 times if Player 2 doesn't have any guess left then Player 2 loses.
- If Player 2 can guess the word within the attempt then Player 2 wins

### Input:

The input consists of two lines representing a single game of Hangman. The first line contains the word to be guessed, a non-empty string of uppercase English alphabet letters (A–Z) of maximum length 16. The second line contains a permutation of the 26 letters of the English alphabet, also uppercase.

### Output:

If Player 2 wins the game by guessing letters in the order given by the permutation (proceeding from left to right), output "WIN". Otherwise, output "LOSE".

#### Sample Input 1:

```
HANGMAN  
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

#### Sample Output1:

```
WIN
```

#### Sample Input 2:

```
BANANA  
ABCDEFGHIJKLMNOPQRSTUVWXYZ
```

#### Sample Output 2:

```
LOSE
```