Problem A. You're a Copycat!

Time Limit   1000 ms
Mem Limit   524288 kB

Read an integer variable and print it.

Input

The input will contain an integer A ($-200000000 < A < 200000000$).

Output

Print the integer.

Sample

Input	Output
2	2

Problem B. PewDiePie

Time Limit   1000 ms

Mem Limit   524288 kB

Given the radius of a circle, calculate and print its area.

The area of a circle can be computed using the following formula:

$$A = \pi r^2$$

For pi, you can use 3.141592653589793, or `acos(-1)`.

Input

The input will contain one floating-point number r ($0 < r < 2000$).

Output

Print the area of the circle (accurate to 10^{-4}).

Sample

Input	Output
2	12.5663706144

Problem C. Your friend's looking for change!

Time Limit   1000 ms

Mem Limit   524288 kB

You have an unlimited number of cash notes of the following denominations: 1, 5, 10, 50, 100, 500.

Given a number N, determine the minimum number of cash notes required to make the total N. For this problem, you will have to print out the values of each cash note in ascending order.

For example, when $N = 1535$, the minimum number of notes required is 7. And to make this total, you need the following cash notes:

```
1 | 5 10 10 10 500 500 500
```

Input

The input will contain a single integer N ($1 \leq N \leq 10^4$).

Output

Print the cash note values that in total make N while requiring the minimum number of cash notes.

Sample

Input	Output
1535	5 10 10 10 500 500 500

Problem D. Let's go on a Picnic

Time Limit	1000 ms
Code Length Limit	50000 B
OS	Linux

Chef is planning a family picnic. He will go to the picnic only if the temperature on that day is **strictly greater** than 24 degrees.

Given that the temperature on a day is X degrees, find whether he will go to the picnic on that day.

Input Format

- The first line of input will contain a single integer T, denoting the number of test cases.
- Each test case consists of a single integer X – the temperature on a given day.

Output Format

For each test case, output on a new line, YES , if Chef will go to the picnic, and NO otherwise.

You may print each character in uppercase or lowercase. For example, NO, no, No, and n0, are all considered the same.

Constraints

- $1 \leq T \leq 100$
- $1 \leq X \leq 100$

Sample 1

Input	Output
4 12 24 25 60	NO NO YES YES

Test case 1: The temperature on the day is 12 which is **not** $>$ 24. Thus, Chef will not go to the picnic.

Test case 2: The temperature on the day is 24 which is **not** $>$ 24. Thus, Chef will not go to the picnic.

Test case 3: The temperature on the day is 25 which is $>$ 24. Thus, Chef will go to the picnic.

Test case 4: The temperature on the day is 60 which is $>$ 24. Thus, Chef will go to the picnic.

Problem E. Win a Jackpot!

Time Limit	500 ms
Code Length Limit	50000 B
OS	Linux

Read problem statements in [Mandarin Chinese](#), [Russian](#), and [Vietnamese](#) as well.

Chef buys a lottery ticket that has a 3 digit code associated with it. He thinks that digit 7 is his lucky digit and brings him good luck. Chef will win some amount in the lottery if at least one of the digits of the lottery ticket is 7.

Given three digits A, B, and C of the lottery ticket, tell whether Chef wins something or not?

Input Format

- First line will contain T, the number of test cases. Then the test cases follow.
- Each test case contains a single line of input, three space separated integers A, B, C.

Output Format

For each testcase, output in a single line answer `"YES"` if Chef wins a positive amount with the lottery and `"NO"` if not.

You may print each character of the string in uppercase or lowercase (for example, the strings "yEs", "yes", "Yes" and "YES" will all be treated as identical).

Constraints

- $1 \leq T \leq 1000$
- $0 \leq A, B, C \leq 9$

Sample 1

Input	Output
3 0 0 0 7 8 9 2 7 7	NO YES YES

Test Case 1: Since no digit is equal to 7, Chef fails to win any amount in the lottery.

Test Case 2: Since the first digit is equal to 7, Chef will win some amount in the lottery.

Test Case 3: Since the second and third digit is equal to 7, Chef will win some amount in the lottery.

Problem F. Square Game

Time Limit	1000 ms
Code Length Limit	50000 B
OS	Linux

Problem Statement

Write a program that accepts numbers and prints their squares.

Input

- First line contains the number of integers, **N**.
- The next **N** lines which follow each have an integer.

Output

For each integer, output one new line which contains the square of that integer.

Constraints

- $1 \leq N \leq 20$
- $0 \leq$ every integer ≤ 100

Sample Input

```
7
0
1
2
3
4
5
10
```

Sample Output

```
0
1
4
9
16
```

25

100

Problem G. Get a life coder!

Time Limit	2000 ms
Code Length Limit	50000 B
OS	Linux

Coders/programmers are the backbone of the new age society (though whether they themselves have a strong backbone is debatable :P). As some wise man said, a task stops being fun when someone starts paying you to do it and commands you. Similarly, though coding is quite fun, in a corporate setting, if the coders work continuously without breaks, they will soon get tired and bored.

You have data about the activities of a programmer over the month of April (which, in case you didn't know, has exactly 30 days). For each day, you know whether the programmer coded on that day or not. If the coder codes consecutively for more than 5 days, she gets bored. Given the activities of the programmer, tell whether she is always a happy person or whether she has gotten bored at some point. If she has been bored, you should support her by outputting `#coderlifematters`, otherwise output `#allcodersarefun`.

Input Format

The first line of the input contains an integer `T` denoting the number of test cases. The description of `T` cases follow.

The only line of each test case contains 30 space-separated boolean integers denoting whether the coder programmed on that day of the month or not. `1` signifies that she coded on that day, and a `0` denotes that she did not.

Output Format

For each test case, output in a single line `#coderlifematters` if the coder has been bored. If not, output `#allcodersarefun`.

Constraints

- $1 \le$ `T` ≤ 1000

Sample 1

Input	Output
4 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 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 0 0 1 1 1 1 1 0 0 1 1 1 1 1 0 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 1 1 1 1 1 1 1 0 0 0 0 0 0 1 1	#coderlifematters #allcodersarefun #allcodersarefun #coderlifematters

Testcase 1: The coder is working all days in the month. She is very bored.

Testcase 2: The coder didn't work any day during the month. We shouldn't call such a person a coder, but what matters is that she has a job and she is happy and we should chant `#allcodersarefun`.

Testcase 3: This is a typical professional coder. She works hard for 5 days, takes a break for 2 days and then works again. She is happy, so why should we be worried, let us chant `#allcodersarefun`.

Testcase 4: This seems like a curious case of a programmer, she works 7 days and rests 7 days. Even if she rests well, but as she works for more than 5 days consecutively, her life is still boring (as she doesn't get to party on weekends). So, we shall say `#coderlifematters`.