

Exam "Fundamentals of programming with C#" – 27 May 2018

Problem 1. World of Codecraft

1. History

Welcome to the World of Codecraft. A magical place, where mighty coders join forces and fight together to battle off the mighty evil entities known as BUGS. The coders are fierce and mighty warriors, but they don't like extreme weather and will not go on in a battle if the weather is too cold or too hot. The great oracle - "Vanga" has predicted the temperature for the next 10 days. **Your task is to analyze the data and decide if the warriors can go onto battle.**

2. Description

You will receive the data for the next 10 days in the form of decimal numbers, each on a separate line. You should then print a message that will decide if the warriors can go onto battle.

Keep in mind that the warriors will not go to battle if the temperature on **any day** is **below -10 degrees** or **above 45**. Also, if on **5 or more** days the temperature is **below 0**, the warriors will also refuse going.

Input

Exactly ten input lines:

- Each line will be a decimal number, representing the average temperature on that day.
- The number will always be in the range **[-100.00...100.00]**

Output

You should output a single line, indicating the outcome of the analyzed data.

If **all conditions are met** and the temperatures are satisfying for the coders (according to the requirement), you should print the following line

- **"The lowest temperature is {minimumTemperature} degrees. The coders are off to battle!"**

If the conditions do not meet the requirements you should print the following line

- **"The lowest temperature is {minimumTemperature} degrees. The coders rest."**

The minimum temperature must be formatted to one decimal place after the decimal separator.

Examples

Input	Output	Description
22 15.3 14.2 11.9 30 30 25 18.9 14.2 5.5	The lowest temperature is 5.5 degrees. The coders are off to battle!	We check each of the numbers and validate it according to the requirements. No number is outside the allowed range, and the temperature doesn't drop below zero for more than 5 days. We take the average temperature and print it to the console.
Input	Output	Description
15 33 -8.4 12.2 16.4 -5 13 -12.5 26 20	The lowest temperature is -12.5 degrees. The coders rest.	On day 8 the temperature drops below -10 degrees, which means the coders cannot go to battle. So we print an according message.
Input	Output	
-10 45 14 16 18 -5 12 37 31 -3	The lowest temperature is -10 degrees. The coders are off to battle!	