Zoro Wants to Sleep Again

Time Limit: 1 s
Memory Limit: 256 MB

Description

Zoro really loves to sleep, especially after playing Adobe VALORANT until late at night with his friends. But *unfortunately* today, he got a class in the morning. Zoro set an alarm just in case, and he'll always wake up to it, though he really wants to go back to sleep if he could.

You're a good friend of him so you want to make sure he gets to sleep as he wants and still be able to attend the class. Write a program to find out whether he can get back to sleep and how long it is, but if he can't, let him know right away. He would also need some time to go to the classroom so take that into account.

Input

- The first line contains two integers *wakeHH* and *wakeMM*, the time when Zoro wakes up by the alarm (in hours and minutes respectively)
- The second line also contains two integers *classHH* and *classMM*, the time when the class starts (also in hours and minutes)
- The last line contains two integers *tripTime* and *minSleepTime*. *tripTime* is the time he needs to go to the classroom (in some cases, *tripTime* can be 0) and *minSleepTime* is the minimum time in minutes that Zoro wants to sleep

Output

- If there's a time for him to sleep, print `Zoro can sleep for another X minutes :D`, where X is the duration if he gets to sleep equal to or more than *minSleepTime*
- If he wakes up and the time is not enough for him to sleep again, print `Don't sleep again or you'll be late, Zoro`
- If he just woke up and there is not enough time to go to the classroom or the class has already started, print `Sleepyhead you already late smh`

Constraints

$0 \le wakeHH, classHH \le 12$

$0 \le wakeMM, classMM \le 59$

$0 \le tripTime, minSleepTime \le 120$

Examples

#1

Input
6 0 7 0 20 10
Output
Zoro can sleep for another 40 minutes :D

#2

Input
7 0 7 30 20 15
Output
Don't sleep again or you'll be late, Zoro

#3

Input
9 30 9 0 10 10
Output
Sleepyhead you already late smh

Explanation

In example #1, Zoro wakes up at 6:00 and the class will start at 7:00. He needs 20 minutes to go to the classroom so he must go at least at 6:40. He wants to sleep for at least 10 minutes, and since the time allows him to, he can go back to sleep for

another 40 minutes.

In example #2, the class will start at 7:30, and Zoro woke up at 7:00. He needs 20 minutes to go to the classroom but he still wants to sleep for at least 15 minutes, so warns him that he better not going to sleep again because the time is not enough.

In example #3, he's already 30 minutes late to the class, so just let him know.