What's the Time?

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Banterbry is taking a Math Exam! Unfortunately, the exam is set by Ryan the Mathematician, who enjoys watching students explode with diabolical Math questions. Oops! This time around, all questions of the paper is set in this format: "It is N minutes after 0000. What is the time now?", and students would have to answer in the 24-hour clock convention.

Sounds easy right? The catch is, $1 \leq N \leq 10^{18}$. Please help banterbry solve the problems before his mind turns into a mushy mess!

Input

The first and only line of the input is N, the number of minutes after 0000.

Output

Output your answer to the question in the 24-hour clock format.

Please refer to the sample input for exact formatting guide.

Scoring

For all subtasks:

- $1 \leq N \leq 10^{18}$

Subtask	Additional Constraints	Points
1	$1 \leq N \leq 59$	10
2	$1 \leq N \leq 1339$	20
3	$1 \leq N \leq 10^6$	30
4	No Additional Constraints	40
5	Sample Testcases	0

Examples

standard input	standard output
56	0056
720	1200
1500	0100
988826	1626

Note

For sample inputs 1 and 3, do note that leading zero(es) must be placed for 24 hour clock if the hour is less than 10.