
System Error

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

Mahdi , Omar and Fares have a team named System Error (they won SCPC last year).They competed in a contest and they were given n problems numbred form 1 to n .Mahdi solved the 1st problem, Omar solved the 2nd problem , Fares solved the 3rd problem then Mahdi solved the 4th problem ans so on .. .

Your task is to determine the number of problems solved by each one of them knowing that they solved all the problems .

Input

Input contains only one line: the number of the problems ($1 \leq n \leq 10^{18}$) .

Output

Print in one line three space-separated integers : the number of problems solved by Mahdi, the number of problems solved by Omar and the number of problems solved by Fares .

Example

standard input	standard output
3	1 1 1