Refrigerator

Dan need to buy a refrigerator with a capacity of L (liters) to store food.

The bigger surface refrigerator, it will drain faster. Therefore, Dan want to buy the smallest surface refrigerator(The store has all the size and capacity).

Input

One Integer L(1 <= L <= 10^6)

Output

3 integer c, b,a (unit: dm), and a <= b <=c. If there are many answers, select 3 numbers a, b, c in order of largest a, largest b.

Example

Input: 12

Output: 3 2 2

Input: 13

Output:

13 1 1