Problem 2

Lab assignment 2 Assemble

Problem 2. Tiered Water Pricing (30 pts)

Tiered water pricing is a common form of water billing in cities.

Suppose a city has the following tiered water pricing rules:

- Rule 1: For water usage up to 15 tons, the price is 1 yuan per ton.
- Rule 2: For water usage between 15 and 20 tons, the first 15 tons follow Rule 1, and the remaining water usage is priced at 2 yuan per ton.
- Rule 3: For water usage exceeding 20 tons, the first 15 tons follow Rule 1, the portion between 15 and 20 tons follows Rule 2, and the remaining water usage is priced at 3 yuan per ton.

You need to write a program to assist users in calculating their water bill.

Input Format

The input consists of a single floating-point number X ($0 < X < 200$), representing the water usage in tons.

In this problem, you need to perform the calculations using the **double data type** in RV32. Therefore, when reading the input floating-point number, use the NO. 7 system call.

Output Format

Output a single floating-point number O, representing the amount the user needs to pay for the water bill.

Samples

Sample 1

Input

```
5.0
```

output

```
5.0
```

Sample 2

Input

```
25.0
```

output

```
40.0
```