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The Virtual Learning Environment for Computer Programming

## Unlucky numbers — P27658_en

Professor Oak has many quirks. For instance, he thinks that the multiples of 13 are unlucky: 13, 26, 39, 52, .... Moreover, for some reason he also dislikes numbers like 174, "because" its distance to the next century is a (strictly positive) multiple of 13: $200 - 174 = 26$. For the same reason he disaproves numbers like 1061 or 48: $1100 - 1061 = 39$, $100 - 48 = 52$. Note that some numbers like 1287 are doubly disliked: $1287 = 99 \cdot 13$, $1300 - 1287 = 13$.

Given a number $n$, can you count how many numbers between 1 and $n$ are liked?

### Input

Input consists of several natural numbers $n$, each one between 1 and $10^{15}$.

### Output

For every $n$, print the quantity of numbers in $[1, n]$ liked by Professor Oak.

### Sample input 1

```
9
13
100
200
1000000000
1000000000000000
```

### Sample output 1

```
8
11
86
171
858461534
858461538461534
```

### Problem information

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