Problem A

For given n ($n \le 10^7$), determine the number of rational numbers q such that $0 < q \le 1$ and q can be expressed as a fraction a/b such that $b \le n$.

Input and output

The input consists of a single integer n, the output of a single integer, the number of rational numbers q with the property described above.

Example

Input:

```
100
```

Output:

```
3044
```