

## 7613 Relative atomic mass

Relative atomic mass is a dimensionless physical quantity, the ratio of the average mass of atoms of an element (from a single given sample or source) to  $\frac{1}{12}$  of the mass of an atom of carbon-12 (known as the unified atomic mass unit).

You need to calculate the relative atomic mass of a molecule, which consists of one or several atoms. In this problem, you only need to process molecules which contain hydrogen atoms, oxygen atoms, and carbon atoms. These three types of atom are written as 'H', 'O' and 'C' respectively. For your information, the relative atomic mass of one hydrogen atom is 1, and the relative atomic mass of one oxygen atom is 16 and the relative atomic mass of one carbon atom is 12. A molecule is demonstrated as a string, of which each letter is for an atom.

For example, a molecule 'HOH' contains two hydrogen atoms and one oxygen atom, therefore its relative atomic mass is  $18 = 2 * 1 + 16$ .

### Input

The first line of input contains one integer  $N$  ( $N \leq 10$ ), the number of molecules.

In the next  $N$  lines, the  $i$ -th line contains a string, describing the  $i$ -th molecule. The length of each string would not exceed 10.

### Output

For each molecule, output its relative atomic mass.

### Sample Input

```
5
H
C
O
HOH
CHHHCHHOH
```

### Sample Output

```
1
12
16
18
46
```