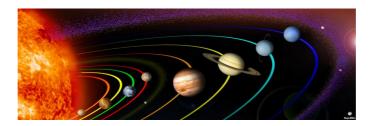


Introduction

The actual definition of a year is the time it takes to a planet to complete a single orbit around the Sun. That is, here on Earth, we consider a year to be 365 days.



But if you were to live in another planet of our Solar System – a year would work out to something else. Fortunately, we have a simple table to get the equivalence in Earth days of any planet's year.

Planet	Revolution period in Earth days
Mercury	88
Venus	225
Earth	365
Mars	687
Jupiter	4333
Saturn	10759
Uranus	30689
Neptune	60182

Since we plan to travel around the Solar System it is important to have conversion software to know the Earth age of the interplanetary travelers. Can you provide an easy way to convert the age expressed in years in a given planet to its value in Earth years?

Input

The input consists of two lines. The first line is an integer indicating your current age in years in the planet where you live. The second line is a string with the name of the planet where you live. <Current age in years in the planet where you live> <Name of the planet where you live>

Output

Print out your age in Earth years as an integer value.

Example

Input 10

Mars

Output

18