Moran Numbers

A Harshad number is a number which is divisible by the sum of its digits. For example, 132 is divisible by 6 (1+3+2).

A subset of the Harshad numbers are the Moran numbers. Moran numbers yield a prime when divided by the sum of their digits. For example, 133 divided by 7 (1+3+3) yields 19, a prime.

Your task is to write a function that takes a number and returns "M" if the number is a Moran number, "H" if it is a (non-Moran) Harshad number, or "Neither".

Input
The first line of input contains a number.

Output
The first line contains "M" if the number is a Moran number, "H" if it is a (non-Moran) Harshad number, or "Neither".

Sample input	Sample output
132	H
133	M
134	Neither