Perfect Number

Check if a given number is perfect or not. A number is perfect if sum of factorial of its digit is equal to the given number. For example **145** is a Perfect Number because 1! + 4! + 5! = 145

Input:

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. The next T lines will contain an integer N.

Output:

Corresponding to each test case, in a new line, print "Perfect " if it follow above condition else print "Not Perfect" without quotes.

Constraints:

 $1 \le T \le 50$

 $1 \le N \le 10000$

Example:

Input:

2

23

145

Output:

Not Perfect
Perfect