**Perfect Number**

[maths](http://www.practice.geeksforgeeks.org/tag-page.php?tag=maths&isCmp=0)

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.

**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 ≤ T ≤ 50

1 ≤ N ≤ 10000

**Example:**

**Input:**

2

23

145

**Output:**  
Not Perfect  
Perfect

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=1281>

#include <iostream>

#include <stdio.h>

#include <vector>

#include <algorithm>

using namespace std;

int factorial(int n) {

  int prod = 1;

  for(int i =2;i<=n; i++) {

       prod \*=i;

  }

  return prod;

}

int main() {

  int t;

  scanf("%d", &t);

  while(t--) {

    int n;

    scanf("%d", &n);

    int c = n;

    int sum =0;

    while(c > 0) {

      sum += factorial(c%10);

      c/=10;

    }

    if(sum == n) {

       printf("Perfect");

    } else {

        printf("Not Perfect");

    }

    printf("**\n**");

  }

 //  system("pause");

  return 0;

}