1683 - DPA

Description

In the mathematical works usually with dividers numbers for many applications. In our case, we want to make a classification system with the divisors of a number N.
Our system will have 3 possible classifications:

- Deficient.
- Perfect.
- Abundant.

We say that a number is Deficient if the sum of its divisors, excluding N, is less than N. It is Perfect if the sum of these divisors is equal to N. Abundant, in the event that the sum of the divisors is greater than N.

Input specification

Line 1: A number C which represents the number of cases tested.
Then C lines, where each line will show a number N (1 <= N <= 500).

Output specification

C lines: In each line, a string of characters ("Deficient", "Perfect" or "Abundant"), indicating the type of classification according to the above system.

Sample input

```
3
6
12
3
```

Sample output

```
Perfect
Abundant
```

Deficient

Hint(s)

Source	Ruben Alcolea Núñez
Added by	**ymondelo20**
Addition date	2012-02-18
Time limit (ms)	1000
Test limit (ms)	1000
Memory limit (kb)	150000
Output limit (mb)	64
Size limit (bytes)	30000
Enabled languages	C C# C++ Java Pascal Perl PHP Python Ruby Text