## Sums and addends

Given a natural number $n$, please find all non-decreasing sequences of integers, such that the sum of all the elements of the sequence is equal to $n$. Numbers in the sequence may repeat. Due to the imposed politically correct "parity policy" each valid sequence must contain the same number of odd and even elements.

## Input data specification

The first line contains the number of test cases $t$. Each of the following $t$ lines contains just one number $1<=n<=40$.

## Output data specification

For each test case print all possible sequences satisfying the problem criteria. Sequences must be given in the lexicographic order, with each sequence printed in a separate line.

If no valid sequence exists for a given value of $n$, print the text "Impossible".

## Example 1

## Input:

3
4
8
7

## Output:

Impossible
1124
1223
16
25
34

## Scoring

By solving this problem you will score 10 points.

