**Algorithms Fundamentals with Java: Exam**

This document defines the exam for ["Algorithms – Fundamentals (Java)" course @ Software University.](https://softuni.bg/trainings/3811/algorithms-fundamentals-with-java-june-2022)  Please submit your solutions (source code) of all below described problems in [Judge](https://judge.softuni.org/Contests/3593/Algorithms-Fundamentals-with-Java-Exam-31-July-2022).

1. **Numbers**

By given number **N** print all the possible ways to get that number by summing other numbers which may repeat, see the example below.

## Input

* The input will come from the console as a single integer **N**

## Output

* The output is the ways you can get that number **N** by summing other numbers. See the examples below.

## Constraints

* The input numbers will be valid integer in the range [0…100]

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3 | 3  2 + 1  1 + 1 + 1 |
| 5 | 5  4 + 1  3 + 2  3 + 1 + 1  2 + 2 + 1  2 + 1 + 1 + 1  1 + 1 + 1 + 1 + 1 |

“I'd rather be a rising ape than a falling angel.”  
― **Terry Pratchett**