**Algorithms with Java: Retake Exam 04-07-2020**

This document defines the retake exam for ["Algorithms – Fundamentals (Java)" course @ Software University](https://softuni.bg/trainings/2991/algorithms-fundamentals-with-java-may-2020). Please submit your solutions (source code) of all below described problems in [Judge](https://judge.softuni.bg/Contests/2492/Algorithms-Fundamentals-with-Java-Retake-Exam-04-July-2020).

1. **Two Minutes to Midnight**

*Well it is dark outside and many unnatural creatures dwell in the dark. There is nothing more fearsome than Midnight and you have only two minutes.*

You are on an adventure and you have found yourself stuck in front of great challenge. There is a door blocking your path it will unlock after you have guessed the correct number which is the answer to the following riddle:

In **how** many **ways** can you select the loot inside the treasure room, given that you have **N** items and you can only pick **K** of those?

So you need to develop a program which produces a **single number** as an output.

You receive **two** **numbers** first one represents the number of **items**, and the **second** one represents the number of those that you **can** **get**.

*Hurry up!!! You have only two minutes and then the Midnight will be upon your will.*

## Input

* The input will come from the console on two lines each line will represent a single number

## Output

* The output is always a single number.

## Constraints

* All input lines will be **valid the first number will always be not less than the second**.
* The input will be in the range **[1…1000]**

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 5  3 | 10 |
| 48  17 | 4244421484512 |

*“It’s still magic even if you know how it’s done.” (A Hat Full of Sky)*