

# Memory Management – Lab

Submit your solutions here: <https://judge.softuni.org/Contests/4620/Memory-Management-Lab>

## 1. MinBy

Write a program that:

- Reads **input string** from the first line (sequence of words, separated by space)
- Reads **integer number** from the second line
- If the number is equals to:
  - 1 -> **find and print the string that is earliest lexicographically**
  - 2 -> **find and print the shortest string**
  - 3 -> **find and print the longest string**

## Examples

Input	Output
hear the rime of the ancient mariner see his eyes as he stops one of 3	ancient
e abc df e 1	abc

## 2. Remove Invalid

Write a program that:

- Reads info about **companies in the following format: {name} {id}**
- Read infos until **you receive command "end"**
- Print **all companies with a valid id**

**Note:** Valid ids are **non-negative**.

## Examples

Input	Output
123 valid -123 invalid 321 ancientmarinerinc end	123 valid 321 ancientmarinerinc
42 noinvalidhere end	42 noinvalidhere