# Memory Management – Lab

Submit your solutions here: <https://alpha.judge.softuni.org/contests/memory-management-lab/4620>

## 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 |

## 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 |