Data Structures	Assignment 0 (Part A)
CCO 2103-01, Spring 2024	Due at 5:00pm, Wednesday, March 13

Hand in your solutions electronically using LearnUs.

Assignment 0 has two parts. The primary purpose of Assignment 0 is to help you acquire basic knowledge of Java programming. For this reason, Assignment 0 will count as 1/10 of an assignment when the final grade is calculated. The course staff will be exceptionally generous in giving out hints, and the grading will also be generous. (This is why you do not want to plagiarize others' work in spite of the fact that Assignment 0 is very similar to what was given in the previous iterations of this course – it is simply not worth it.)

This assignment is *not* a completion points assignment: incorrect solutions will not receive full points.

Submit your source code(s), zipped as *yourStudentID*.zip. For example, if your student ID is 2023000000, then you must zip all your source code(s) into 2023000000.zip and submit this file. Each class should have its own .java file, of which the filename is the same as the class name. Do *not* include your student ID as part of the class names.

Your program must not assume one particular newline convention, i.e., your program must be ready for both CR+LF and LF as the newline markers in the input file. One easy way to achieve this is using BufferedReader.readLine().

This part of the assignment consists of one programming task.

(1) (4 points) Before your departure from Korea for holidays, you want to purchase a large number of souvenirs. For financial reasons, you want to make sure you get something not too expensive. Given a list of available souvenirs, consisting of their names and prices per piece, find the name of the souvenir that has the lowest price.

The entry point of your program must be As0.main(). That is, we will run your code by executing the following:

```
java As0
```

Submit your source code(s). Bytecodes are not needed.

Your program must read its input from input.txt in the current working directory. This file is organized as follows: the first line of the file contains the number of entries n. Each of the following n lines shows *the price and the name* of a single item, in that order, separated by a space. You do not need to check if the input is well-formed: we will test your program only with the inputs that follow this input format. You can assume that $n \geq 1$ and every price is a nonnegative integer no greater than 2^{30}.

Your program must output the name of a least expensive souvenir to output.txt in the current working directory. The output must consist of a single line. Ties are broken arbitrarily, i.e., if there are more than one least expensive souvenirs, your program can (and must) output ***any one*** of them.

Example

input.txt

```
4
100100 Watches
2001 Key holders
2001 Stamps
30002 Data structure textbooks
```

output.txt

```
Key holders
```