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| **Project 7** | **CMPT 438 Algorithms** |
|  | **Fall 2016** |

**Shoemaker’s Problem**

Shoemaker has N jobs (orders from customers) which he must make. Shoemaker can work on only one job in each day. For each ith job, it is known the integer Ti (1<=Ti<=1000), the time in days it takes the shoemaker to finish the job. For each day of delay before starting to work for the ith job, shoemaker must pay a fine of Si (1<=Si<=10000) cents. Your task is to help the shoemaker, writing a program to find the sequence of jobs with minimal total fine.

**Input**: First line of input contains an integer N (1<=N<=1000). The next N lines each contain two numbers: the time and fine of each task in order.

**Output**: You program should print the sequence of jobs with minimal fine.

Sample input:

4

3 4

1 1000

2 2

5 5

Sample output:

2 1 3 4

Solve the problem using greedy algorithms. Submit a MS word document to Moodle (lms.manhattan.edu) that consists of the followings:

* Source code in either C++ or Java
* Screenshot of the output