

Problem H

Hidden Hierarchy

Submits: 95

Accepted: at least 52

First solved by: MFF3
Charles University in Prague
(Konečný, Madaj, Rozhoň)
00:22:48

Author: Luka Kalinovič

Files

```
/sys/kernel/notes 100
/cerc/problems/a/testdata/in 1000000
/cerc/problems/a/testdata/out 8
/cerc/problems/a/luka.cc 500
/cerc/problems/a/zuza.cc 5000
/cerc/problems/b/testdata/in 15
/cerc/problems/b/testdata/out 4
/cerc/problems/b/kale.cc 100
/cerc/documents/rules.pdf 4000
```

Directory tree

```
- / 1009727
- /cerc/ 1009627
  /cerc/documents/ 4000
- /cerc/problems/ 1005627
- /cerc/problems/a/ 1005508
  /cerc/problems/a/testdata/ 1000008
- /cerc/problems/b/ 119
  /cerc/problems/b/testdata/ 19
- /sys/ 100
  /sys/kernel/ 100
```

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+ /cerc/problems/b/ 119
- /sys/ 100
  /sys/kernel/ 100
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/cerc/problems/a/testdata/in 1000000  
/cerc/problems/a/testdata/out 8  
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+ /cerc/problems/b/ 119  
+ /sys/ 100
```

Step 1: Build the directory tree.

For each file:

Make a list p of parent directories up to the root

For each dir in list p :

Add file size to dir size

For each adjacent dir_A , dir_B in list p :

Add dir_B to the set of dir_A 's subdirectories

Step 2: Find directories to collapse.

Collapse a dir if:

- a) It has subdirectories, and
- b) size of each subdirectory is below threshold.

Step 3: Print the directory tree recursively.

Tip: Consider Python.