DWITE '09 R6 #5 - Air Travel Planning

Time limit: 1.0s **Memory limit:** 64M

DWITE Online Computer Programming Contest, April 2010, Problem 5

Congratulations, you've landed a paid co-op position and can start working on gaining work experience and paying off all of those student loans... but the job is far, and air travel is expensive. Looking to squeeze a few extra dollars in savings, the quest is to find the cheapest possible flight, even if that requires multiple connections.

The flight search is to go from `YYZ` to `SEA`.

The input will contain 5 sets of input. Each set starts with an integer $1 \leq N \leq 20$ — size of available data, followed by N lines describing the available flights, in the form of `CODE1 CODE2 price`. Codes are 3 character long airport codes, the prices are positive integer values.

The output will contain 5 lines, integer values for the cheapest total flights for each scenario.

Note: there will always be a possible flight path.

Note 2: the flights are described in a single direction. That is `SEA YYZ 1` can not be taken to go **from** `YYZ` **to** `SEA`.

Sample Input

```
1
YYZ SEA 500
3
YYZ SEA 500
YYZ YVR 300
YVR SEA 100
```

Sample Output

```
500
400
```

Problem Resource: DWITE