



Zinio International S L

Send please the solution to this technical test as a git repository and send us a link to it. Please, don't copy a solution from Internet, we will know it! (we admit a clever refactor of a solution). Have a proper unit test file for the solution is a must.

Scenario

"You are a successful salesman working for a big company. You have 32 big accounts around the globe to visit on a periodic basis, and you have been assigned the project of saving money on your already dilated travel expense allowance. Given a list of your companies GPS locations, write a script that will help you find the shortest path to visit all 32 places once."

Input file specifications

The input file will contain a listing of cities and coordinates in a tab-delimited file. The filename is named exactly "cities.txt". Your script will assume this file is located on the same directory where the script is executed. There are no additional spaces or lines at the beginning or end of the file. The list will begin in "Beijing", you must begin your route there. An example input file:

```
Beijing 39.93 116.40
Vladivostok 43.8 131.54
Dakar 14.40 -17.28
Singapore 1.14 103.55 (...)
```

Script and Runtime Specifications

Your main file must be named "solve.php", but you may add other files if you wish. The maximum execution time is 15 minutes.

Output

Your script's final (and only) output will be using any standard output function. Do not attempt to write to disk, only print to screen. The output must consist of a list of the 32 original cities provided in the input file "cities.txt". These 32 cities should be ordered in the exact order in which you will visit your companies. There must be only one city name (exact spelling) per line followed by a newline delimiter (\n). You will be judged on the total distance covered in your travels, the shorter the better. You cannot visit a city twice, and you must visit all cities. The schema for your output print should be: Beijing\n Vlad

Delivery Format:

Submit a URL to a git repository containing your code.

List of cities:

```
Beijing 39.93 116.40
Tokyo 35.40 139.45
Vladivostok 43.8 131.54
Dakar 14.40 -17.28
```



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Singapore 1.14 103.55
San Francisco 37.47 -122.26
Auckland -36.52 174.45
London 51.32 -0.5
Reykjavík 64.4 -21.58
Paris 48.86 2.34
Prague 50.5 14.26
New York 40.47 -73.58
New Delhi 28.60 77.22
Rio -22.57 -43.12
Mexico City 19.26 -99.7
Lima -12 -77.2
Moscow 55.45 37.36
Cairo 30.2 31.21
Toronto 43.40 -79.24
Santiago -12.56 -38.27
Caracas 10.28 -67.2
San Jose 9.55 -84.02
Lusaka -15.25 28.16
Casablanca 33.35 -7.39
Astana 51.10 71.30
Bangkok 13.45 100.30
Perth -31.57 115.52
Melbourne -37.47 144.58
Vancouver 49.16 -123.07
Anchorage 61.17 -150.02
Accra 5.35 -0.06
Jerusalem 31.78 35.22