

Coding test

Libraries are allowed. If you use libraries, please provide installation instructions.

Database design

Design a set of SQL tables for a blog. Include users, comments, blog posts, and any other objects you feel are relevant. Please include comments for fields that might be unclear. PostgreSQL is the ideal database to target, but if you're not familiar with it, others are also acceptable.

API interaction

Using <http://jsonplaceholder.typicode.com>, write a script to

1. get the 200 most recent TODOs
2. create a TODO
3. delete a TODO given an ID.

Algorithms

Write a script which prints all the permutations of a string in lexicographic order. We consider that digits < upper case letters < lower case letters. The sorting should be performed in ascending order.

Your program should accept a file as its first argument. The file contains input strings, one per line. Print to `stdout` the permutations of the string separated by comma, in alphabetical order.

Contents of sample input file:

```
hat
abc
Zu6
```

Expected output for the input above:

```
aht,ath,hat,hta,tah,tha
abc,acb,bac,bca,cab,cba
6Zu,6uZ,Z6u,Zu6,u6Z,uZ6
```