Enterprise Applications

Backend Engineering Coding Challenge

Please solve the coding tasks in Golang. Please provide us with a git bundle containing your solutions for all tasks. The coding challenge should match following criteria:

1. Keep it simple
2. Your code should be production ready (Dockerfile is a must)
3. Unit tests
4. Readme (it should be clear to us how to execute your program. Preferably directly as Docker image)

Programming Task 1

Given an input as JSON array of flat objects, write a program that will parse the JSON and return a nested JSON of objects of arrays with keys specified in command line arguments. The leaf values are arrays of flat objects matching appropriate groups.

Sample command:

```
{your_program} nesting_level_1 nesting_level_2 … nesting_level_n
```

For example, invoking the program like this:

```
$ cat input.json | {your_program} currency country city
```

Should return the output as in `output.json`. Please use `input.json` as example input.

Please note, the nesting keys should be stripped out from the objects in the leaves. Also the program should support an arbitrary number of arguments (arbitrary levels of nesting).

Programming Task 2

Create a REST service from the first task. Make sure your methods support basic auth. Input JSON should be received as a POST request. Nesting parameters should be specified as request parameters.