

Proton Python Coding Test

Time limit: 48 hours

Please send results in a tarball. It should contain a git repo with a README file.

Make sure your code is highly performant, reliable, and maintainable, as if it was going to be used for Proton's production system.

Please do this task purely by yourself, without help from AI or others.

Task

Implement a command and control program that allows us to run tasks on multiple servers. Your program should be able to run a simple yaml format playbook such as the example below:

```
---
- hosts: dbservers
  tasks:

    - name: Server uptime
      bash: uptime

    - name: Server disk usage
      bash: du -h
```

Your program should read `/etc/playbook/hosts` and run the tasks from the playbook on every server in the hosts group.

Example of a hosts file below:

```
[webservers]
foo.example.com
bar.example.com

[dbservers]
one.example.com
two.example.com
three.example.com
```

Results from the tasks should be outputted to the terminal. Note, there may be many servers as part of the hosts group. The only task type that your program needs to support is `bash`.