1. **Please describe how you finished Task I**
   First, find the hidden directory by inspecting /etc/crontab. Then, read crack_me.log character by character and xor each character by a key. Try every possible key until a readable output is discovered. Finally, replace the number and encrypt the file back.
2. **Please propose three security settings in SSH server that can prevent common dictionary attack**
   a. Install safety module like fail2ban so that the attacker will be banned after trying just a few passwords.
   b. Disable password login and use private key authentication instead, since it is much harder to brute force a private key.
   c. Accept connection only from trusted IPs and networks.
3. **Please explain why Linux differentiates crontab into three types (users, system and applications).**
   By doing so, it will be easier to manage various cronjob, for example, if an application is to install a new job, it can simply place a file in cron.d/. And if the user wants to delete such application, cron jobs can also be easily cleanup by deleting a file. Furthermore, the operating system can have better permission control. The OS can restrict the permission of /etc/crontab so that normal users will not be able to edit critical system cron jobs.