Scripting for Server Security Part 1

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Complete the following problems

Please include the script, a screenshot showing it works as intended, cite all sources you used, and give a short explanation of how the script works works and why.

A lot of these would make sense as a cron job, make sure you set up a cron job for at least the snapshot, but feel free to use cron jobs for the rest as well.

- 1. Write a Script to detect ip addresses trying to gain access, examples of things to pay attention to include all use between midnight and 6, all logins for a specific user, anything else you consider behavior that should send up a red flag. Make sure to include in your assignment what you consider a "red flag" and why
- 2. Write script to detect changes to a specific directory. Such as changes to /var/log or /etc/ think about using a diff here, or a hash.
- 3. Monitor hidden files, root executables, and see if changes are made, who made them, and when they were changed

Deliverables

1. Well commented and tested scripts including a link to your GitHub where you've uploaded them.

- 2. You should have 1 document for your CentOS machine and 1 for your other server.
- 3. Documentation for scripts should include any changes or updates to the system needed for these scripts to run.
- 4. Include any assumptions made with justifications, such as: what is considered concerning behavior? which directories are the most concerning if changes are made to them and why?
- 5. A small paragraph or two explaining if there anything else you think you should have a script and/or cron job for relating to security? why or why not? Must include AT LEAST 3 sources