Pwn Challenge (15 points)

The Secure Grep Server 2.0 allows untrusted clients to safely search data in public files, using validated search keys. Upcoming versions will also allow password-protected access to private files. Stay tuned! You can access the service using 'nc <ip> <port>'.
The source code is available here: https://lettieri.iet.unipi.it/hacking/2022-06-16.tar.gz

You can request two hints on the solution:

- Hint #1: Analysis of the bug. Cost: -3 points.

- Hint #2: Attack plan. Cost: -2 points.

Web Challenge (15 points)

Ghostcont is a website through which it is possible to monitor all the vapors and the ectoplasmic entities confined in the containment unit placed at the Ghostbuster Inc. headquarters in 14 North Moore Street, New York City. Each ghost is accompanied by a description and categorized with a class, which can be from I to VII. Be careful while hacking this! You could cause a massive ectoplasmic leakage which could attract some Ancient God in our dimension!

You can request two hints on the solution:

- Hint #1. Nature of the vulnerability and which input to leverage. Cost: -3 points.

- Hint #2. PHP code of the website. Cost: -2 points.