Lab 5 Testing Document

Bradley Stephen
Ben Wyand

Environment Variables and MD5 Hash

1. During testing, the selfcomp program successfully printed the environment variables, and these are recorded in environmentvars.txt. This confirmed the presence of the additional MD5 variable, which was dynamically added on line 13 of selfcomp.

2. However, the server failed to print the environment variables, and this functionality remains incomplete. Despite this, the alignment of the MARKET string was verified, logging an additional 208 bytes.

3. The server crashed during the process, and the stack pointer was successfully extracted. However, the inability to print the environment variables persisted.

Procedure for Testing Environment Variables

To verify the environment variables:

- **Step 1:** Use selfcomp to print the environment variables before running the server. This ensures consistency and confirms the presence of the additional MD5 variable.

- **Step 2:** Attempt to retrieve and print environment variables from the server (this step remained incomplete due to unresolved issues).

Extracted Information and Password

From the **Lab5media** information:
The following seed words and numbers were identified:

- SusanMurphy9

- MurphSoft9

- @SusanMurphy9

- LifeOfMurphy9

- Cloud9

- Red9

- Sam9

These seed phrases were used for constructing potential password guesses for the MD5 hash. The guesses were formatted as a capitalized word followed by a number (e.g., Foo123).

Note: These password guesses were strictly for educational purposes to learn about MD5 hashing and were **not executed**, as the testing process was stopped at the server step.

Observations

1. The selfcomp program correctly printed the environment variables, as verified in environmentvars.txt.

2. The server's failure to output environment variables is an unresolved issue.

3. The seed phrases provided useful context for constructing password guesses but were not tested beyond the server step.

Conclusion

The testing process confirmed that selfcomp correctly outputs environment variables, including the added MD5 hash. However, the server's inability to print environment variables requires further debugging. The seed phrases from the **Lab5media** information provided educational insight into password construction but were not used for testing beyond this point.