

Assignment - Environment Variables

1. What is the difference between environment variables and shell variables?
2. Display the environment variables currently available to the shell. Display the contents of any 5 such variables. (**env command**)
3. In Bash, if we run "*export foo=bar*", does it change the environment variable of the current process? [L]
[SEP]
4. The followings are two different ways to print out environment variables. Describe their differences: [L]
[SEP]
 - **\$ /usr/bin/env**
 - **\$ /usr/bin/strings /proc/\$\$/environ**
5. Write a program to pass user defined environment variables using the help of command line arguments and display the same.
6. Experiment passing both variables and functions as environment variables to the child process.
7. Define a function inside an environment variable. When executing a child process how can we invoke that function by passing that as an environment variable to child process.
8. Demonstrate the redirection of an inbuilt command or an application (e.g. ls, cat, cal or any command of your choice) to some user defined executable by manipulating the required environment variable. [L]
[SEP]
9. Write a program to demonstrate the attacks through the use of Dynamic Linker. Also, show the effect if we set the same program as a SetUID program.