Bash Shell Scripting

Lab 1: Exit Status Code Usage

Write a script which does an **ls** for a nonexistent file, followed by a display of the exit status code. Then create a file and display the new exit status code. In each task, send the **ls** output to `/dev/null`.

Lab 2: Working with Files

Write a script that will ask the user for a directory name, which the script will create. Change the working directory to the new directory and tell the user where you are using the **pwd** command.

Next use **touch** to create a few files followed by displaying the filenames. Use **echo** and redirection to put some content into the files and show the user the content. Finally, say goodbye to the user to end the script.

Lab 3: Environment Variables

Write a script which asks the user for a number (1 or 2) which the script will use to determine whether an environment variable will be set to yes or no, then set the environment variable and export it. Tell the user what needs to be entered when the script starts. Check to see if the user put in a number. If not, set the environment variable to unknown.

Lab 4: Functions

Write a script that asks the user for a number (1, 2 or 3) which is used to call a function with that number in its name. The function then displays a message with the function number within it, for example, "This message is from function 3."

Lab 5: Arithmetic

Write a script that will act as a simple calculator for add, subtract, multiply, and divide; each operation should be in a function of its own. Any of the three methods for **bash** arithmetic, **let, expr** or **$((..))**, may be used. The user should pass as an argument on the command line a letter (a,s,m or d) and two numbers. The letter will be used to determine which operation will be performed on the two numbers entered. If one or more of the three parameters is left out, then display a usage message. Finally display the answer.