

## Shell Scripting Exercise

Name: \_\_\_\_\_ Date: \_\_\_\_\_

In this exercise, we will write a series of shell scripts that will accomplish what the supervisor asks. At the beginning of the program, we should add a comment explaining what the program does. We should add comments throughout the program for other programmers to read.

1. Write a shell script called adding that asks for two numbers and add them together. The variable for the first number is **num1** and the second number is **num2**. The variable for the answer should be **total**. Output the answer to the terminal window.

2. Write a shell script called multiply that asks for three numbers and finds the product of the three. The variable for the first number is **fig1**, the second number is **fig2** and the third number is **fig3**. The variable for the answer should be **answer**. Output the answer to the terminal window.

## Shell Scripting Exercise

3. Write a shell script that prompts what is your GPA on a 4.0 scale. If your response is over 4.0, then tell them of their mistake and ask again. If the GPA is 3.6 to 4.0, then we will congratulate them. If the GPA is 0.0 to 3.59, then we will output that they can seek tutoring.

4. Write a shell script that asks for the name of the workgroup on your laptop. If the name of the group matches BITLAB, tell the user they are correct. If the answer does not match, tell them to change their workgroup.

## Shell Scripting Exercise

5. Write a shell script that creates the following text files: top, bottom, right and left using the for loop.

6. Write a shell script that outputs a list from A to Z.

## Shell Scripting Exercise

7. Write a shell script that will prompt the user for a file name and ask the user how many files you want to have. The file names along with their number could be CARL1, CARL2 and CARL3. The program will use a while loop to create multiple files.

8. Write a shell script that will find a factorial such as 5!, which is  $5 \times 4 \times 3 \times 2 \times 1$ . Use a while loop after prompting the user for the factorial number.

## Shell Scripting Exercise

9. Write a shell script that outputs a list from A to Z using the character to ASCII code `printf "%d\n" "A"` and ASCII to number code `awk -v char=65 'BEGIN { printf "%c\n", char; exit }'`. The while loop will be used to add a one to each ASCII number to output letters A to Z.