Lab Assignment-1: Shell Programming

1. Write a script to find the greatest of three numbers (numbers passed as command line parameters)
2. Write a script to check whether the given no. is even/odd
3. Write a script to calculate the average of n numbers.
4. Write a script to check whether the given number is prime or not.
5. Write a script to check whether the given input is a number or a string.
6. Write a script to compute no. of characters and words in each line of given file.
7. Write a script to print the Fibonacci series up to n terms
8. Write a script to calculate the factorial of a given number
9. Write a script to calculate the sum of digits of the given number
10. Write a script to check whether the given string is a palindrome
11. Write a shell script that accepts a string from the terminal and echo a suitable message if it doesn't have at least 5 characters including the other symbols.
12. Write a shell script to echo the string length of the given string as argument.
13. Write a shell script that accepts two directory names as arguments and deletes those files in the first directory which are similarly named in the second directly. Note: Contents should also match inside the files.
14. Write a shell script to display the processes running on the system for every 30 seconds, but only for 3 times.
15. Write a shell script that displays the last modification time of any file.
16. Write a shell script to check the spellings of any text document given as an argument.
17. Write a shell script to encrypt any text file.
18. Combine the above commands in a shell script so that you have a small program for extracting a wordlist.
19. Write a shell script which reads the contents in a text file and removes all the blank spaces in them and redirects the output to a file.
20. Write a shell script that changes the name of the files passed as arguments to lowercase.
21. Write a shell script to translate all the characters to lower case in a given text file.
22. Write a shell script to combine any three text files into a single file (append them in the order as they appear in the arguments) and display the word count.
23. Write a shell script that, given a file name as the argument will write the even numbered line to a file with name evenfile and odd numbered lines to a file called oddfile.
24. Write a shell script which deletes all the even numbered lines in a text file.
25. Write a script called hello which outputs the following: • your username • the time and date • who is logged on • also output a line of asterices (********) after each section.
26. Write a script that will count the number of files in each of your subdirectories.
27. Write a shell script like a more command. It asks the user name, the name of the file on command prompt and displays only the 15 lines of the file at a time on the screen. Further, next 15 lines will be displayed only when the user presses the enter key / any other key.
28. Write a shell script that counts English language articles (a, an, the) in a given text file.
29. Write the shell script which will replace each occurrence of character c with the characters chr in a string s. It should also display the number of replacements.

30. Write a shell program to concatenate to two strings given as input and display the resultant string along with its string length. Write a shell program to simulate a simple calculator.
31. Write a shell program to count the following in a text file. • Number of vowels in a given text file. • Number of blank spaces. • Number of characters. • Number of symbols. • Number of lines