Shell Programming

Practice Assignment 3

Q1. How can we pass arguments to a script in Linux? And how to access these arguments from within the script?

Q2. Write a shell script to get the current date, time, username and current working directory.

Q3. How to ask for input in a shell script from the terminal?

Q4. How can we perform numeric comparisons in Linux?

Q5. What is the syntax for different types of loops available in shell scripting?

Q6. How will you find the sum of all numbers in a file in Linux?

Q7. Write a shell script that adds an extension "new1" to all the files in a directory.

Q8. Write a shell script to validate password strength. Here are a few assumptions for the password string.

- Length – minimum of 8 characters.
- Contain both alphabet and number.
- Include both the small and capital case letters.

Q9. How to check if the previous command was run successfully?

Q10. How to get the last line from a file using just the terminal?

Q11. How to get the first line from a file using just the terminal?

Q12. How to print the first array element? How to print all array elements and their respective indexes?

Q13. write a shell script that prompts the user for a name of a file or directory and reports if it is a regular file, a directory, or another type of file. Also perform an ls command against the file or directory with the long listing option.

Q14. Write a Shell Script that adds two numbers if provided as the command Line Argument and if the two numbers are not entered throws an Error Message.

Q15. Write a shell script to calculate the average of 10 numbers.

Q16. For instance, we want to document the marks for a certain course. The total marks are 200 with 100 marks for Quizzes and 100 for assignments. We want to display the sum of assignments and quizzes while making sure the overall count does not exceed 200.

Q17. Let's take another example of a bank account program in which we want to have three separate outputs for 3 different situations:

- The balance is less than zero

- The balance is zero
- The balance is above zero

Q18. Write a shell script to print a number in reverse order.

Q19. Using select loop print any one of the day from Monday to Sunday.

Q20. Write a shell script to print the count of files and subdirectories in specified directory.

Q21. Write a shell script which will print the maximum and minimum among three numbers.

Q22. Write a shell script to evaluate arithmetic operations.

Q23. Write a shell script to calculate simple interest.
Q24. Write a shell script to determine a given year is leap year or not.

Q25. Write a shell script to print multiplication table of given number using while loop.

Q26. Write a shell script to compare two string.
Q27. Write a shell script to implement menu driven program to perform all arithmetic operation using case statement.

Q28. Write a shell script to print following pattern.

```
*
* *
* * *
 * * * *
```

Q29. Write a shell script to read the file word by word with serial number.

****