## **Assignment for O.S. Lab (Sem 5)**

**A1.** Welcome to Bash learning and \*\*\*\*\*\*\*\*\*on separate line. (Video 478)

http://spoken-tutorial.org; http://sakshat.ac.in.

A2. Write a simple Bash program to get the following system variables pwd logname. (Video 479)

http://spoken-tutorial.org; http://sakshat.ac.in.

A3. Write a simple Bash program To ask username from user

To exit the program, if user does not enter anything within 10 seconds Hint: read -t 10 -p. (Video 479)

http://spoken-tutorial.org; http://sakshat.ac.in.

- A4. Using wildard, redirect all the files starting from letter 'c' to another file name' Myfiles'. (Video 480)
- A5. Write a bash program for addition using command line arguments. (Video 480)
- A6. Write a Bash script to do all operations discussed under Globbing. (Video 481)

- A7. Declare Array names of length 7 and find (Video 482)
- a) The total number of elements.
- b) Print all the elements.
- c) Print the 5th element.
- A8. Declare an Array names2 of length 7 and perform following operations. (Video 483)
- A9. Extract three elements starting from index two. Replace third element with 'XXX' and display. (Video 483)
- A10. Append any new name at the end of Array. (Video 483)
- A11. Write a script: (Video 484)

Take your name as an input

It should check this name with your system's username

If the username match, it should greet you by displaying Hello

Else, it should display Try again

Hint: Your system's username is stored in a variable \$USER.

- A12. Write a program to output different messages: (Video 485)
- 1) When number is greater than 3.
- 2) Lesser than 3.
- 3) Equal to 3 or when user input is empty.
- A13. Check whether the file exists and is executable using logical operators. (Video 502)

[Hint: man test]

A14. 1) Write a program to demonstrate the use of not equal to operator. (Video 503)

Hint: -ne.

A15. Explore some more attributes: (Video 504)

-r

-X

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A16. Find the sum of first n prime numbers. (Video 505).

A17. Retype nested-for.sh bash script using nested while loop

Save our program with the name: nested-while. Sh. (Video 528)

A18. Write a menu driven program for mathematical calculation. (Video 529)

It should take user inputs a and b.

It should ask for mathematical operator (+, -, / and \*).

Do the calculation and print the output.

- A19. Write a program with two functions. (Video 542)
- a) The first function should display disk space usage in human readable form.

(Hint: df -h).

b) The second function should display file system usage in human readable form.

(Hint: du -h).

- A20. Write a program, where the function accepts two arguments. (Video 546)
- A21. The function should multiply the two arguments. (Video 546)
- A22. Make 3 function calls with arguments (1, 2), (2, 3) and (3, 4). (Video 546)

- A23. Write a program (Video 559)
- a) Where a function adds all the elements in an array.
- b) The function should display the sum of elements.
- c) Make 2 function calls with array elements- (1, 2, 3) and (4, 5, 6).
- A24. Write a function add to add two numbers and call the function in another file. (Video 567)
- A25. Write a program where the recursive function calculates the sum of N numbers. (Video 568)
- A26. Write a program in any language like C, C++, Java.

And redirect the output or error to a new file. (Video 570)

OR

Create a text file with some content like your name, address.

Redirect the content to a new file.

A27. Create X file.txt file with some content. (Video 582)

- A28. Redirect the content of both out file.txt and X file.txt to a new file. (Video 582)
- A29. Convert a string to uppercase using: (Video 583)
  - a) Here document
  - b) Here string

(Hint: tr a-z A-Z).

A30. Try to append few lines to a file test.txt using file descriptor. Display the content of the file using file descriptor. (Video 603)