

**Subject: Unix Programming Lab**

**Lab 8: Shell Scripts**

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1. Write a shell script that comparison (i) whether two numbers are equal or not, (ii) whether two strings are equal or not.
2. Write a shell script to display numbers from 0 to 9.
3. Write a shell script that has function which can take user inputs and pass these inputs to another function as arguments which swap the values and display the swapped values.
4. Write a shell script to calculate the sum of digits of an integer number, when the number is input through the keyboard as command-line argument.
5. Write a shell script that takes command-line argument and reports on whether it is directory, a file or something else.
6. Write a shell script that has a function that count the number of files in the directory provided as command-line argument.
7. Write a shell script that will display different message based on the name of day. For eg., if today is Sat, it will display "Today is Unix Programming Lab". Use **case** statement for its implementation. To get the name of the day, use (i) **cut** command.
8. Using while loop print the numbers from 1 to n ( n is a command line argument)
9. Find sum of all elements from 0 to 9 using for loop.
10. Write a shell script that takes a filename as argument (which must exist in the current directory, otherwise the script must generate error message) and locates from your home directory tree all pathnames of its links. The list should be saved in a new file result.txt.
11. Write a shell script that counts the number of lines in an input file.
12. Write a shell script loop terminates as soon as value of variable a becomes 5.

13. What will be the output of the following shell script:

```
14. #!/bin/sh
15.
16. # Define your function here
17. Hello () {
18.     echo "Hello World $1 $2"
19.     return 10
20. }
21.
22. # Invoke your function
23. Hello Zara Ali
24.
25. # Capture value returned by last command
26. ret=$?
27. echo "Return value is $ret"
```

14. What will be the output of the following shell script:

```
#!/bin/sh

NUMS="1 2 3 4 5 6 7"

for NUM in $NUMS
do
    Q=`expr $NUM % 2`
    if [ $Q -eq 0 ]
    then
        echo "Number is an even number!!"
        continue
    fi
    echo "Found odd number"done
```

15. What will be the output of the following shell script:

```
#!/bin/sh

NUMS="1 2 3 4 5 6 7"

for NUM in $NUMS
do
    Q=`expr $NUM % 2`
    if [ $Q -eq 0 ]
    then
        echo "Number is an even number!!"
        continue
    fi
    echo "Found odd number"
done
```

16. What will be the output of the following shell script:

```
17.#!/bin/sh
18.
19.NAME[0]="Zara"
20.NAME[1]="Qadir"
21.NAME[2]="Mahnaz"
22.NAME[3]="Ayan"
23.NAME[4]="Daisy"
24.echo "First Method: ${NAME[*]}"
25.echo "Second Method: ${NAME[@]}"
```