

# **UNIX ASSIGNMENT**

## **Assignment-1**

1. Write a shell script to calculate simple interest.
2. Write a shell script to calculate salary from given basic.  
Salary = basic + dp + da +hra +ma –pf  
basic – to be taken as input  
dp – 50 % of basic  
da – 35 % of (basic + dp)  
hra – 8 % of (basic + dp)  
ma – 3 % of (basic + dp)  
pf – 10% of (basic + dp)
3. Write a shell script to calculate the average of a set of N number.
4. Write a Unix shell script to find the sum of number to given number.  
e.g. if entered number is 5 then 1+2+3+4+5
5. Write a shell script to perform like calculator. It should ask for the number and operand from the user.

## **Assignment-2**

1. Write a shell script to calculate the area of rectangle. It should take the value from the command line.
2. Write a shell script to take two numbers from command line and show result of dividing small number with bigger number. Also note that it should not accept zero or negative number. If user enter zero or negative number then it should prompt to input correct number after displaying proper message.
3. Write a Unix Shell Script which prints the following
  - a. Current home directory.
  - b. Current user name.
  - c. The message "Today is :" with current date in MM/dd/yy format
  - d. The message "No of users logged in :" with total no of current logged in users
  - e. The message "Terminal :” With you own terminal number
4. Write a shell script to create a command line calculator.  
e.g. input : mycal 5 + 5      Result : 10 , input : mycal 5 / 5      result : 1

5. Write a shell script that takes as command line input a number N and a Word. it then prints the word n times., one word per line

### Assignment-3

1. Write a shell script to rename file having extension sh to exe.
2. Write a Unix shell script to accept 10 number and tell how many are +tive, -tive and zero. Also display the in ascending order.
3. Write a shell script to examine all the number from 1 to 999 and display all those number whose sum of cube of the digit is equal to the number.  
e.g.  $371 = 3^3 + 7^3 + 1^3$
4. Write a shell script to display Date in different format along with Time.
5. Write a shell script to accept five number and display max and min value. If any two or three or four values are same then display proper message.

### Assignment-4

1. Write a shell script to find out how many file and directory are their in current directory. Also list the file and directory name separately.
2. Write a shell script to create a menu driven program for adding, deletion or finding a record in a database. Database should have the field like rollno, name, semester and marks of three subjects. Last option of the menu should be to exit the menu.
3. Write a shell script to accept the employee name from the user and display appropriate message. Assume employee is working on a single project. Employee project details are stored in the file proj.dat and employee data are stored in

emp.dat

proj.dat

emp\_no      int

proj\_no      int

dayswork   int

emp.dat

emp\_no              int

proj\_no              int

name              char

duration           int

if                      message

duration = dayswork   <name>, Today is last day of project.

duration < dayswork   <name>, you are delaying the project.

daysremaing <= 30                      <name>, hurry up only <days> are remaining.  
 daysremaing > 30                      <name>, you have still <days> to finish the  
 project.

4. Write a shell scripts to count number of vowels in file ignoring the case.
5. Write a shell program which will work like wc.

### **Assignment-5**

1. Write a unix shell to add records to a file called item.dat The fields being  
 itemcode, qty, sold and rate

item_code	to be generated
qty_sold	should be greater than 0
rate	between 100 to 10000

2. Write a Unix shell script which accepts a choice from the user and execute  
 the corresponding option using case structure for above file structure. The  
 format of the menu is

```
+ -> Addtion of record
! -> Modification of records
- -> Deletion of records
s -> Quit
```

3. Write a shell scripts to generate random number. Allow user to guess 6 times  
 to get the no. Print appropriate messages after each guess.

e.g.      Random generated is 10

Users enters 4 message : To small

User enters 14 then Messge to big

4. Write a Unix Shell script that takes a login as a command line argument and  
 reports to you when that person logs in.
5. Write shell script to accept marks of of Unix, VB.Net,PHP and calculate the  
 average of marks and display the message as follow :

if Average	then display
- is 70 or above	"Distinction"
- is 60 <= 70	"First Class"
- is 50 <= 60	"Second Class"
- is 40 <= 50	"Third Class"
- otherwise	"Fail"

## Assignment-6

1. Write a script to find out String is palindrome or not.
2. Write a Shell script to calculate the gross salary of Rajesh whose Basic is input through keyboard. His DA is 34% of basic salary and HRA is 24% of Basic. PF is 11% of the basic.
3. Write a shell script for accepting the following information and storing it in a file.  
CD No., Movie Name, Language, Price and Date of release
4. Write a scripts which copies the content of file1 to file2 without using cp command It should check If file has a read permissions if not it should print an error message. If file2 exists then it should ask the user whether he wants to overwrite it.
5. Write a shell scripts that delete all files in current directory with 0 byte.

## Assignment-7

1. Write a shell script to display a directory listing as follows. Your home directory is <home directory name>

File name	date	time	permission
-----	-----	-----	-----
Filename1	date	time	permission
Filename2	date	time	permission
Filename3	date	time	permission
.....			
.....			

Total no. of files : <total number>

Total no of normal file : <number>

Total no of directory : <number>

2. Write a shell to accept the details for movie LIBRARY.

movie No.

Name of the movie

director

actor

actress

Year of release

category

#### Validations

- 1) Movie no. should not exist in the file.
- 2) 2,3 and 4th entry cannot be blank
- 3) year of release cannot be  $\geq 2008$
- 4) Year of release should be less than 1850
- 5) Category can be comedy, action, thriller, Suspense

The user should be able to repeatedly enter the data until it is valid. He should also be able to enter multiple records

3. Write a shell procedure to delete the specified record from the library file. It should accept a movie number, check whether it exists. If so, display the current details, ask for confirmation and then delete it from the file.
4. Write a shell script to menu driven program that is update and delete student records.
5. Write a shell script to accept 2 matrices and add them & display.

### **Assignment-8**

1. Write a shell script to list all the files of the current directory having read and write permission to the user.
2. Write a shell script to check if name given is file or directory and if it is file then it should display content and if it is a directory then it should display the list.
3. Write a shell script to accept two filenames and check if both exist. If second file exists then append the content of first file to second file.
4. Write a shell script to input a number & display in words.
5. Write a shell script to input a file name and display rights.