**ASS-4**

1) Write a shell script to print

* your are logged in as which user
* in which directory you are
* and in which terminal you are working
* total number of files and directories in current directory

#!/bin/bash

echo "You are logged in as: $(whoami)"

echo "You are in directory: $(pwd)"

echo "You are working in terminal: $(tty)"

echo "Total number of files and directories in current directory: $(ls -1 | wc -l)"

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.

#!/bin/bash

database="database.txt"

while :

do

echo "1. Add record"

echo "2. Delete record"

echo "3. Find record"

echo "4. Exit"

echo "Enter your choice:"

read choice

case $choice in

1)

echo "Enter roll number:"

read rollno

echo "Enter name:"

read name

echo "Enter semester:"

read semester

echo "Enter marks of three subjects:"

read marks1 marks2 marks3

echo "$rollno $name $semester $marks1 $marks2 $marks3" >> $database

echo "Record added successfully";;

2)

echo "Enter roll number of the record to delete:"

read rollno

sed -i "/^$rollno /d" $database

echo "Record deleted successfully";;

3)

echo "Enter roll number to find record:"

read rollno

grep "^$rollno " $database || echo "Record not found";;

4)

exit;;

\*)

echo "Invalid option";;

esac

done

3) Write a Linux shell script to accept 10 number and tell how many are +tive, -tive and zero.

#!/bin/bash

positive=0

negative=0

zero=0

echo "Enter 10 numbers:"

for ((i=1; i<=10; i++))

do

read num

if [ $num -gt 0 ]; then

positive=$((positive + 1))

elif [ $num -lt 0 ]; then

negative=$((negative + 1))

else

zero=$((zero + 1))

fi

done

echo "Positive numbers: $positive"

echo "Negative numbers: $negative"

echo "Zeroes: $zero"

4) Write a shell script to accept five number and display max and min value.

#!/bin/bash

echo "Enter five numbers:"

read num1 num2 num3 num4 num5

max=$num1

min=$num1

if [ $num2 -gt $max ]; then

max=$num2

fi

if [ $num3 -gt $max ]; then

max=$num3

fi

if [ $num4 -gt $max ]; then

max=$num4

fi

if [ $num5 -gt $max ]; then

max=$num5

fi

if [ $num2 -lt $min ]; then

min=$num2

fi

if [ $num3 -lt $min ]; then

min=$num3

fi

if [ $num4 -lt $min ]; then

min=$num4

fi

if [ $num5 -lt $min ]; then

min=$num5

fi

echo "Maximum value: $max"

echo "Minimum value: $min"

5) Write a script to find out String is palindrome or not.

#!/bin/bash

echo "Enter a string:"

read string

reverse=$(echo "$string" | rev)

if [ "$string" == "$reverse" ]; then

echo "String is palindrome"

else

echo "String is not palindrome"

fi

6) Write a shell script to print given number’s sum of all digits (eg. If number is 123, then it’s sum of all digits will be 1+2+3=6)

#!/bin/bash

echo "Enter a number:"

read number

sum=0

while [ $number -gt 0 ]

do

digit=$((number % 10))

sum=$((sum + digit))

number=$((number / 10))

done

echo "Sum of all digits: $sum"

7) Create a script to

Create user , Delete user , Create group , delete Group using case

#!/bin/bash

while :

do

echo "1. Create user"

echo "2. Delete user"

echo "3. Create group"

echo "4. Delete group"

echo "5. Exit"

echo "Enter your choice:"

read choice

case $choice in

1)

echo "Enter username:"

read username

sudo adduser $username

;;

2)

echo "Enter username to delete:"

read username

sudo deluser --remove-home $username

;;

3)

echo "Enter group name:"

read groupname