EXPERIMENT - 2
SHELL PROGRAMMING

AIM
To develop shell scripts with simple functions with basic cuts, loops and pattern

a) Program to check the given number is odd or even

ALGORITHM
STEP 0: START
STEP 1: Enter a number from the user and store it in num.
STEP 2: Set b as num % 2
STEP 3: If b = 0 then display "Even" else display "Odd"
STEP 4: STOP

b) Program to find the num of digits of a given number

ALGORITHM
STEP 0: START
STEP 1: Read number from the user and read it as 'num'
STEP 2: Set num = 0
STEP 3: Repeat steps 4 - 6 if num != 0
STEP 4: Set digit as num % 10
STEP 5: Update num by num/10

STEP 6: Add digit to sum
STEP 7: Display sum
STEP 8: END

c) Program to check if a number is palindrome or not

ALGORITHM

STEP 0: START
STEP 1: Read a number from the user and store it in a variable num
STEP 2: Store num in variable temp
STEP 3: Set sum = 0
STEP 4: If num != 0 then go to STEP 5 else go to STEP
STEP 5: Set temp as temp * 10 + num % 10
STEP 6: Update num as num/10 and go to STEP 4
STEP 7: If temp equal to num then print "Palindrome" else print "Not Palindrome".
STEP 8: STOP

d) Program to find factorial of a given number

ALGORITHM

STEP 0: START
STEP 1: Read a number from the user and store it in 'n'.

STEP 2: Set f as 1
STEP 3: If n>0 then go to STEP 4
else go to STEP 6
STEP 4: Update f = f * n
STEP 5: Decrement n, go to STEP 3
STEP 6: Display f
STEP 7: END

e) Program to implement a simple calculator using switch case
ALGORITHM
STEP 0: START
STEP 1: Display the menu with operations
Addition, subtraction,
Multiplication, Division and
Exit
STEP 2: Repeat the steps 3 - 10
STEP 3: Read two numbers from the
user as a and b
STEP 4: Read the choice as ch from
the user.
STEP 5: If ch = 1, then display a+b
STEP 6: If ch = 2, then display a-b
STEP 7: If ch = 3, then display a*b
STEP 8: If ch = 4, then display a/b
STEP 9: If ch = 5, then exit
STEP 10: For all other case print
"INVALID CASE".
STEP 11: END

f) Menu driven program to display the following details
1) current working directory
2) today's date
3) list of users login

ALGORITHM
STEP 0: START
STEP 1: Display the Menu operations current working Directory, Today's date, list of users and exit
STEP 2: Repeat STEPS 3 - 8
STEP 3: Read the choice of user as ch
STEP 4: If ch = 1, then use pwd command
STEP 5: If ch = 2, then use date command
STEP 6: If ch = 3, then use who command
STEP 7: If ch = 4, then exit
STEP 8: For all other cases, display "INVALID CHOICE"
STEP 9: END

RESULT
Familiarized with the fundamentals of scripting.