Assignment -5 Day5

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

[user1@localhost day5]$ nano pali.sh

#! /bin/bash

len=0

i=1

echo -n "Enter a String: "

read str

len=`echo $str | wc -c`

len=`expr $len - 1`

halfLen=`expr $len / 2`

while [ $i -le $halfLen ]

do

c1=`echo $str|cut -c$i`

c2=`echo $str|cut -c$len`

if [ $c1 != $c2 ] ; then

echo "string is not palindrome"

exit

fi

i=`expr $i + 1`

len=`expr $len - 1`

done

echo "String is Palindrome"

**OUTPUT:**

[user1@localhost day5]$ ./pali.sh

Enter a String: abbc

string is not palindrome

[user1@localhost day5]$ ./pali.sh

Enter a String: abcd

string is not palindrome

[user1@localhost day5]$

**2) Write a shell script to accept 10 numbers and tell how many are +tive, -tive and zero:**

[user1@localhost day5]$ nano chech1.sh

#! /bin/bash

read -p "Enter 10 numbers: " n1 n2 n3 n4 n5 n6 n7 n8 n9 n10

pcount=0

ncount=0

zcount=0

for i in $n1 $n2 $n3 $n4 $n5 $n6 $n7 $n8 $n9 $n10

do

if [ $i -eq 0 ]

then

#echo "$i It is Zero"

let zcount=zcount+1

elif [ $i -lt 0 ]

then

#echo "negative number"

let ncount=ncount+1

else

#echo "positive number"

let pcount=pcount+1

fi

done

echo count of negative number is $ncount

echo count of zero is $zcount

echo count of positive number is $pcount

**OUTPUT:**

[user1@localhost day5]$ nano chech1.sh

[user1@localhost day5]$ ./chech1.sh

Enter 10 numbers: 1 2 4 3 5 0 0 0 -7 -9

count of negative number is 2

count of zero is 3

count of positive number is 5

**3) 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)**

[user1@localhost day5]$ nano sod.sh

#! /bin/bash

echo "Enter a number"

read num

sum=0

while [ $num -gt 0 ]

do

mod=$((num % 10)) #It will split each digits

sum=$((sum + mod)) #Add each digit to sum

num=$((num / 10)) #divide num by 10.

done

echo "Sum of Digit:" $sum

**OUTPUT:**

[user1@localhost day5]$ ./sod.sh

Enter a number

1234

Sum of Digit: 10

**4)Write a shell script to display the prime numbers from 1 to n ( n is a given number )**

[user1@localhost day5]$ nano prime.sh

#! /bin/bash

clear

echo "enter the range"

read n

echo "the prime no are:"

m=2

while [ $m -le $n ]

do

i=2 flag=0

while [ $i -le `expr $m / 2` ]

do

if [ `expr $m % $i` -eq 0 ]

then

flag=1

break

fi

i=`expr $i + 1`

done

if [ $flag -eq 0 ]

then

cho $m

fi

m=`expr $m + 1`

done

**OUTPUT:**

enter the range

20

the prime no are:

2

3

5

7

11

13

17

19

**5) Write a shell script to find whether a given year is leap year or not:**

[user1@localhost day5]$ nano leap.sh

#! /bin/bash

echo "Enter Year:"

read y

year=$y

y=$(( $y % 4 ))

if [ $y -eq 0 ]

then

echo "$year is Leap Year!"

else

echo "$year is not a Leap Year!"

fi

**OUTPUT:**

[user1@localhost day5]$ ./leap.sh

Enter Year:

2020

2020 is Leap Year!

[user1@localhost day5]$ ./leap.sh

Enter Year:

2021

2021 is not a Leap Year!