**Assignment 3 \_Solution**

1. Write a script To check given year is leap or not.

yy=0

isleap="false"

echo -n "Enter year (yyyy) : "

read yy

if [ $((yy % 4)) -ne 0 ] ; then

elif [ $((yy % 400)) -eq 0 ] ; then

isleap="true"

elif [ $((yy % 100)) -eq 0 ] ; then

else

# it is a leap year

isleap="true"

fi

if [ "$isleap" == "true" ];

then

echo "$yy is leap year"

else

echo "$yy is NOT leap year"

fi

2. Write a script to print day of the week using

a) elif b) case

a)

weekday = int(input("Enter weekday day number (1-7) : "))

if weekday == 1 :

print("\nMonday");

elif weekday == 2 :

print("\nTuesday")

elif(weekday == 3) :

print("\nWednesday")

elif(weekday == 4) :

print("\nThursday")

elif(weekday == 5) :

print("\nFriday")

elif(weekday == 6) :

print("\nSaturday")

elif (weekday == 7) :

print("\nSunday")

else :

print("\nPlease enter weekday number between 1-7.")

b)

echo "enter a number"

read n

case $n in

1) echo "Sunday" ;;

2) echo "Monday" ;;

3) echo "Tuesday" ;;

4) echo "Wednesday" ;;

5) echo "Thursday" ;;

6) echo "Friday" ;;

7) echo "Saturday" ;;

\*) echo "enter value between 1 to 7" ;;

esac

3. a) Write a script to find biggest of three no.s

echo "Enter Num1"

read num1

echo "Enter Num2"

read num2

echo "Enter Num3"

read num3

if [ $num1 -gt $num2 ] && [ $num1 -gt $num3 ]

then

echo $num1

elif [ $num2 -gt $num1 ] && [ $num2 -gt $num3 ]

then

echo $num2

else

echo $num3

fi

b) To find avg of 3 no.s, read no.s from keyboard

echo "Enter Size(N)"

read N

i=1

sum=0

echo "Enter Numbers"

while [ $i -le $N ]

do

read num #get number

sum=$((sum + num)) #sum+=num

i=$((i + 1))

done

avg=$(echo $sum / $N | bc -l)

echo $avg

4. Write a program to check wahether given no.is even or odd

echo -n "Enter numnber : "

read n

rem=$(( $n % 2 ))

if [ $rem -eq 0 ]

then

echo "$n is even number"

else

echo "$n is odd number"

fi

5. Write a program to print calendar of current month in next year,previous years.

For eg:-sep 2014,sep 2012 if current month is sep 2013

LAST\_YEAR=`date +'%y' -m 'last year'`

NEXT\_YEAR=`date +'%y' -m 'next year'`

THIS\_YEAR=`date +'%y' -m 'now'`

6. Write a program to find sum and product of two no.s using

a) expr

read a b

sum=`expr $a + $b `

avg=`expr $sum / 2`

dec=`expr $sum % 2`

dec=`expr \( $dec \\* 1000 \) / 2`

product=`expr $a \\* $b \`

echo Sum=$sum

echo Average=$avg.$dec

echo Product=$product

b) |

#!/bin/bash

echo "Please enter your first number: "

read a

echo "Second number: "

read b

sum=$(($a + $b))

avg=$(echo $sum / 2 | bc -l )

prod=$(($a \* $b ))

echo "The sum of these numbers is: " $sum

echo "The average of these numbers is: " $avg

echo "The product of these numbers is: " $prod

7. Write a script to generate Fibonacci series.

N=6

a=0

b=1

echo "The Fibonacci series is : "

for (( i=0; i<N; i++ ))

do

echo -n "$a "

fn=$((a + b))

a=$b

b=$fn

done

8. Write a shell script to reverse the single strings.

#!/ bin / bash

read - p "Enter string:" string

len

= $

{

#string

}

for ((i = $len - 1; i >= 0; i--))

do

reverse = "$reverse${string:$i:1}" done

echo "$reverse"

9.Write a shell script to reverse the list of strings and reverse each string further in the list.

#!/ bin / bash

read - p "Enter string:" string

len

= $

{

#string

}

for ((i = $len - 1; i >= 0; i--))

do

reverse = "$reverse${string:$i:1}" done

echo "$reverse"

10. Write a shell script to print the reverse of an input number.

clear

echo "Enter a number"

read n

sd=0

rev=0

while [ $n -gt 0 ]

do

sd=$(( $n % 10 ))

rev=$(( $rev \*\ 10 + $sd ))

n=$(( $n / 10 ))

done

echo "Reverse number of entered digit is $rev"