## NETWORKING & SYSTEM ADMINISTRATION LAB

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## Experiment No : 13

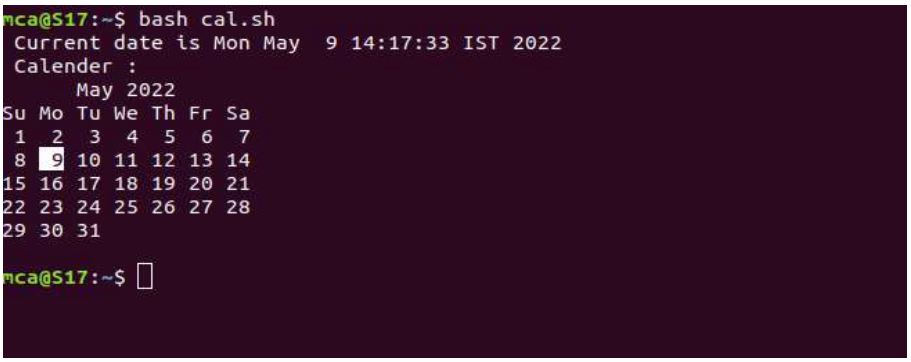
1.Write a shell script to display current date and Calender.

**Procedure:**

```
#!/bin/bash

echo " Current date is $(date)"
echo " Calender :"
cal
```

**Output:**




2.Write a shell script to check a number is greater than,less than or equal to another number.

**Procedure:**

```
#!/bin/bash

echo "Enter the first number:"
read n1
```

```
echo "Enter the second number:"
read n2

if [ $n1 -gt $n2 ]
then
echo "The first number is greater than second number"
elif [ $n2 -gt $n1 ]
then
echo "The first number is less than second number"
else
echo "The first number is equal to second number"
fi
```

**Output:**

```
mca@S17:~$ bash number.sh
Enter the first number:
10
Enter the second number:
10
The first number is equal to second number
mca@S17:~$ bash number.sh
Enter the first number:
10
Enter the second number:
90
The first number is less than second number
mca@S17:~$ bash number.sh
Enter the first number:
20
Enter the second number:
4
The first number is greater than second number
mca@S17:~$
```

3.Write a shell script to find sum of first 10 numbers.

**Procedures:**

```
#!/bin/bash

echo "The sum of the first 10 numbers are:"
sum=0
```

```
for (( i=1;i<=10;i++))
do
sum=$((sum+i))
done
echo $sum
```

**Output:**

```
mca@S17:~$ bash  sum.sh
The sum of the first 10 numbers are:
55
mca@S17:~$
```

4. Write a shell script to find sum,average and product of 4 numbers.

**Procedures:**

```
#!/bin/bash

echo "Enter the number1:"
read n1
echo "Enter the number2:"
read n2
echo "Enter the number3:"
read n3
echo "Enter the number4:"
read n4

sum=0
sum=$((n1+n2+n3+n4))
avg=0
avg=$((sum/4))
pro=0
```

```
pro=$((n1 * n2 * n3 * n4))
echo "The sum of the numbers are:" $sum
echo "The average of the numbers are:"$avg
echo "the product of the numbers are:"$pro
```

**Output:**

```
mca@S17:~$ bash  num.sh
Enter the number1:
30
Enter the number2:
20
Enter the number3:
40
Enter the number4:
10
The sum of the numbers are: 100
The average of the numbers are:25
the product of the numbers are:240000
mca@S17:~$
```

5.Write shell script to find factorial of a given number.

**Procedures:**

```
#!/bin/bash

echo "Enter the number:"
read num
fact=1
for(( i=2;i<=num;i++ ))
do
fact=$((fact*i))
done
echo "The factorial is "$fact
```

**Output:**

```
mca@S17:~$ bash  fact.sh
Enter the number:
4
The factorial is24
```

6.Write shell script to find the given number is palindrome or not.

**Procedure:**

```
#!/bin/bash

echo "Enter the number:"
read num
s=0
rev=" "
temp=$num
while [ $num -gt 0 ]
do
s=$(($num%10))
num=$((num/10))
rev=$(echo ${rev}${s})
done
if [ $temp -eq $rev ]
then
echo "The number is palindrome"
else
echo "The number is not palindrome"
fi
```

**Output:**

```
mca@S17:~$ bash  pal.sh
Enter the number:
454
The number is palindrome
mca@S17:~$ bash  pal.sh
Enter the number:
123
The number is not palindrome
mca@S17:~$
```

**7.**Write a shell script to find given year leap year or not.

**Procedure:**

```
#!/bin/bash


echo "Enter the year:"
read year

if [ $((year % 4)) -eq 0 ]
then
  if [ $((year % 100)) -eq 0 ]
    then
    if [ $((year % 400)) -eq 0 ]
          then
       echo "its a leap year"
    else
          echo "its not a leap year"
    fi
  else
  echo "Its not a leap year"
  fi
else
 echo "its not a leap year"

fi
```

## Output:

```
mca@S17:~$ bash leap.sh
Enter the year:
2000
its a leap year
mca@S17:~$ bash leap.sh
Enter the year:
1900
its not a leap year
mca@S17:~$
```