PRACTICAL – 3

AIM : Write a shell script to generate marksheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.

```
echo " Enter name "
read name
echo " Enter enrollment number "
read no
echo " Enter your marks "
read m1
read m2
read m3
total=$(expr $m1 + $m2 + $m3 )
avg=$(expr $total / 3)
                echo "Student Name : $name"
                echo "EnrollMent NUmber: $no"
                echo "Average is : $avg"
if [ $m1 -ge 35 ] && [ $m2 -ge 35 ] && [ $m3 -ge 35 ]
      then
                echo "Result is: Pass"
if [ $avg -ge 80 ] && [ $avg -le 100 ]
      then
                echo "Result is: Distinction"
 elif [ $avg -ge 61 ] && [ $avg -le 79 ]
      then
      echo "Result is: First class"
 elif [ $avg -ge 35 ] && [ $avg -le 60 ]
      then
      echo "Result is: Second class"
fi
      else
                echo "Result is: fail"
fi
```

O/P :
```
Enter name
DJ
 Enter enrollment number
13
 Enter your marks
89
90
98
Average is : 92
Result is: Distinction
```

PRACTICAL – 4

AIM : Write a shell script to display multiplication table of given number.

```
clear
echo ....................................................
echo '\tMultiplication Table'
echo ....................................................
echo Enter table number
read tn
echo Enter how many rows
read n
i=1
while [ $i -le $n ]
do
      k=$(expr $i \* $tn)
      echo "$i * $tn = $k"
      i=$(expr $i + 1)
done
```

Output:

```
Enter table number
6
Enter how many rows
5
1 * 6 = 6
2 * 6 = 12
3 * 6 = 18
4 * 6 = 24
5 * 6 = 30
```

PRACTICAL – 5

AIM : Write a shell script to find factorial of given number n.

```
echo "Enter the number to find factorial?"
read number
fact=1
while [ $number -gt 0 ]
do
fact=`expr $number \* $fact`
number=`expr $number - 1`
done
echo "factorial is : $fact"
```

O/P:

Enter a number

3

6

Enter a number

4

24

PRACTICAL – 6

AIM : Write a shell script which will accept a number b and display first n prime numbers as output.

```
prime_1=0
echo "enter the range"
read n
echo " Primenumber between 1 to $n is:"
echo "1"
echo "2"
for((i=3;i<=n;))
do
for((j=i-1;j>=2;))
do
if [ `expr $i % $j` -ne 0 ] ; then
prime_1=1
else
prime_1=0
break
fi
j=`expr $j - 1`
done
if [ $prime_1 -eq 1 ] ; then
echo $i
fi
i=`expr $i + 1`
done
```

Output:

```
Enter the range
25
Prime number 1 to 25 is :
1
2
3
5
7
11
13
17
19
23
```

PRACTICAL – 7

AIM : Write a shell script which will generate first n fibonnacci numbers like: 1, 1, 2, 3, 5

```
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
# End of for loop
```

Output:

Fibonacci Series is:
0
1
1
2
3
5
8

PRACTICAL – 8

AIM : Write a menu driven shell script which will print the following menu and execute the given task.
a. Display calendar of current month
b. Display today's date and time
c. Display usernames those are currently logged in the system
d. Display your name at given x, y position
e. Display your terminal number.

echo " MENU
a.   . Display calendar of current month
b.   . Display today's date and time
c.   . Display usernames those are currently logged in the system
d.   . Display your terminal number
e.   . Exit

Read i
Case "$i" in
1)   cal ;;
2)   date ;;
3)   who;;
4)   tty ;;
5)   exit ;;
*) echo "enter valid in put" ;;
esac

Output:

1) February 2018
Su Mo Tu We Th Fr Sa
          1 2 3
 4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28

2) Mon Feb 26 20:16:47 PST 2018

3) paras   tty7   2018-02-26 19:48 (:0)

4) /dev/pts/1