

# Lab-7

## Test-1

### Instruction:

- Execute all the codes before 12.50 PM and get ready for evaluation.
  - The evaluation will start sharp 12.51 PM.
  - If any bodies code is same then both of the student scored zero(0).
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Q1.Input a n digit number and two place value. Exchange that inputted two place value [5]  
and display the number.

Example: n=123456, place1=3, place2=5, O/P: 143256

```
echo "Enter a numer"
read n
declare -a a
temp=$n
i=0
while [ $temp -gt 0 ]
do
k=`expr $temp % 10`
a[$i]=$k
temp=`expr $temp / 10`
i=`expr $i + 1`
done
echo "Enter places to swap"
read l
read m
if [ $l -lt 0 ]
then
echo "Cannot do the operation"
else if [ $l -gt $i ]
then
echo "Cannot do the operation"
else if [ $m -lt 0 ]
then
echo "Cannot do the operation"
else if [ $m -gt $i ]
then
echo "Cannot do the operation"
fi
fi
```

```

fi
fi
l=`expr $l - 1`
m=`expr $m - 1`
t=${a[$l]}
a[$l]=${a[$m]}
a[$m]=$t
i=`expr $i - 1`
temp=0
while [ $i -ge 0 ]
do
t=${a[$i]}
temp=`expr $temp \* 10 + $t`
i=`expr $i - 1`
done
echo $temp

```

Q2.Display the pattern using loop

[5]

```

7 6 5 4 3 2 1
5 4 3 2 1
3 2 1
1

```

```

i=7
k=0
while [ $i -gt 0 ]
do
temp=$k
while [ $temp -gt 0 ]
do
echo -n " "
temp=`expr $temp - 1`
done
k=`expr $k + 1`
j=$i
while [ $j -gt 0 ]
do
echo -n "$j"
j=`expr $j - 1`
done
echo ""
i=`expr $i - 2`
done

```