Exp 0:

Command Substitution: Sum 456

```
#fn=456
# a=`echo $fn  |cut -c 1`
# b=`echo $fn  |cut -c 2`
# c=`echo $fn  |cut -c 3`
#d=`expr $a + $b + $c`
# echo “sum of 456 is :” $d
```

1)program for addition and subtraction

```
echo "Enter a:"
read a
echo "Enter b:"
read b
sum=`expr $a + $b`
diff=`expr $a - $b`
prod=`expr $a \* $b`
quo=`expr $a / $b`
echo $sum
echo $diff
echo $prod
echo $quo
```

2 multiple conditions in for loop

```
for g in 1 2 3
do
  for c in 123 456 789
  do
     if [[ ( "$g" -eq 1 && "$c" = "123" ) || ( "$g" -eq 2 && "$c" = "456" ) ]];
then
echo "g = $g; c = $c; true"
     else
 echo "g = $g; c = $c; false"
      fi
  done
```

3 program on while

```
a=0;
while [ $a -lt 5 ];
do
date
a=`expr $a + 1`
done
```

4 Program on for loop

```
i=1
for day in Mon Tue Wed Thu Fri
do
echo "Weekday $((i++)) : $day"
done
```

5 shell script with C snippet

```
#!/bin/bash
for (( c=1; c<=5; c++ ))
do
echo "Welcome $c times..."
done
```

6 shell script to execute to identify the count of word(user) in passwd file

```
#!/bin/bash
for f in /etc/*
do
if [ "${f}" == "/etc/passwd" ];  then
 c=$(grep -c User /etc/passwd)
 echo "Total  ${c} name defined in ${f}"
 break
fi
done
```

7 Shell script to identify file or folder

```
#!/bin/bash
FILES="$@"
for f in $FILES
do
      # if .bak backup file exists, read next file
if [ -f $f ]; then
 echo "It is a file"
 continue  # read next file and skip cp command
fi
done
```

9 shell script for function to add numbers

```
#!/bin/bash
#function to add two numbers
add()
{
x=$1
y=$2
echo -e "Number entered by u are: $x and $y"
echo "sum of $1 and $2 is `expr $x + $y` "
}
```

```
# main script
echo "enter first number"
read first
echo "enter second number"
read sec
#calling function
add $first $sec
echo "end of the script"
```

10 Case syntax in shell script

```
#!/bin/bash
for filename in $(ls)
do
     # Take extension available in a filename
      ext=${filename##*\.}
      case "$ext" in
      c) echo "$filename : C source file"
         ;;
      o) echo "$filename : Object file"
         ;;
      sh) echo "$filename : Shell script"
          ;;
      txt) echo "$filename : Text file"
           ;;
      *) echo " $filename : Not processed"
         ;;
esac
done
```

11 Case with user inputs

```
#!/bin/bash
echo -n "Do you agree with this? [yes or no]: "
read yno
case $yno in
      [yY] | [yY][Ee][Ss] )
            echo "Agreed"
            ;;

      [nN] | [n|N][O|o] )
            echo "Not agreed, you can't proceed the installation";
            exit 1
            ;;
      *) echo "Invalid input"
         ;;
esac
```

12 Case with starting the application

```
#!/bin/bash

case "$1" in
'start')
echo "Starting application"
/usr/bin/startpc
;;
'stop')
echo "Stopping application"
/usr/bin/stoppc
;;
'restart')
echo "Usage: $0 [start|stop]"
;;
esac
```