```
if [ $# -ne 1 ]
then
    echo "No argument"
    exit
fi
if [ ! -e $1 ]
then
    echo "The given directory does not exist"
    exit
fi

max=`ls -lR $1 | sort -k5 -n | tr -s " " | tail -1 | cut -d " " -f5`
name=`ls -lR $1 | sort -k5 -n | tr -s " " | tail -1 | cut -d " " -f9-`
echo "The file with maximum length of $max filename is $name"
```

```
clear
echo -e "Enter Direcotry Name like (a/b/c/d) :- \c"
read dname
cur=`pwd`
IFS="/"
for i in $dname
do
  if [ -d $i ]
  then
   echo "Direcotry Exsist"
   mkdir $i
   echo "Directory Created $i"
  fi
  cd $i
done
cd $cur
```

```
#Two File Permission Check
clear
echo -e "Enter First FileName :- \c"
read f1
echo -e "Enter Secoend FileName :- \c"
read f2
if [ -f "$f1" -a -f "$f2" ]
then
  perl=`ls -l $f1 | tr -s " " | cut -d " " -f1`
  per2=`ls -l $f2 | tr -s " " | cut -d " " -f1`
 if [ "$per1" = "$per2" ]
 then
   echo "permission Are Same = $per1 "
   echo "permission are different"
 fi
  echo "please Enter Correct Filename"
fi
```

```
#valid login then Display user path
clear
echo -e "Enter Username :- \c"
read name
if [ -z $name ]
then
   echo "Please Enter Correct Name "
else
   path=`grep "$name" /etc/passwd | cut -d ":" -f6`
   if [ ! -z $path ]
   then
      echo "user = $name and path is = $path"
   else
      echo "invalid Username"
   fi
fi
```

```
#terminal locked after password
clear
stty -echo
echo -e "Enter Password :- \c"
read pass
echo -e "\nEnter Confirm Password :- \c"
read cpass
if [ "$pass" = "$cpass" ]
then
 echo -e "\nTerminal Are Locked !"
 echo -e "Enter Password To Unlock Terminal :-\c"
 read apass
 while [ "$cpass" != "$apass" ]
   echo -e "\nWrong Password Agin Type : \c"
   read apass
  done
  echo -e "\n"
else
 echo -e "\nPassword Don't Match"
fi
stty echo
```

```
clear
for i in `ls`
do
   count=`expr $i : '.*'`
   if [ $count -gt 10 ]
   then
      echo $i
   fi
done
```

```
#user logged in name morning print
clear
h=`date +%H`
if [ $h -lt 12 ]
then
  echo "Good Morning"
elif [ $h -lt 18 ]
then
  echo "Good Evening"
else
  echo "Good Night"
fi
```

```
clear
while [ true ]
do
 echo -e "Enter Filename :- \c"
 read fl
  if [ -f $fl ]
 then
   ftime=`ls -l $fl | tr -s " " | cut -d " " -f6-8`
  echo -e "\n File Name is $fl and time is $ftime"
  fi
  echo -e "\nEnter Want To know anthor fie (Y/N) :- \c"
  read choice
  if [ $choice != 'N' ]
  then
  exit
 fi
done
```

```
if [ $# -ne 0 ]
then
 for f in $*
 do
   if [ -f $f ]
   then
    echo "---- $f Uppercase ----- "
    cat $f | tr "a-z" "A-Z"
    echo "-----"
  else
    echo "Not File"
  fi
 done
else
 echo "Not Argument"
fi
```

```
clear
if [ $# -eq 0 ]
  echo "Enter The Argument !"
else
  for i in $*
  do
   if [ -f $i ]
   then
      size=`ls -l $i | tr -s " " | cut -d " " -f5`
      echo "Filename Is = $i and Size =$size"
      if [ -w $i ]
      then
        echo "writeble"
      fi
      if [ -r $i ]
      then
        echo "readable"
      fi
      if [ -w $i ]
      then
        echo "executable"
     fi
      stat $i
    else
     echo "File Not Found"
    fi
  done
fi
```

```
clear
if [ $# -eq 0 ]
then
  echo "Give The Filename And Directory Name"
else
  dir=`pwd`
 if [ $# -eq 2 ]
  then
    dir=$2
  fi
  echo "Directory Is :- $dir"
  link=`ls -l $dir/$1 | tr -s " " | cut -d " " -f2`
  inode=`ls -i $dir/$1 | tr -s " " | cut -d " " -f1`
  echo "No Of Link $1 are : $link"
  echo "Inode Number is = $inode"
  if [ $link -eq 1 ]
  then
    echo "The File Has No Links"
  else
    echo "The Name Of The Link File Are "
    find $dir -inum $inode -print
  fi
fi
echo "Number of linkes of file $1: $link"
```

```
if [ $# -eq 0 ]
then
   echo "Enter File Names !"
else
   str=`cat $1 | tr ' ' '\n' | sort | uniq`
   shift
   for wrd in $str
   do
        cnt=0
        for file in $*
        do
            n=`grep -wc $wrd $file`
            cnt=`expr $cnt + $n`
        done
        echo "$wrd word count : $cnt"
   done
fi
```

```
d=`date +%e`
echo "Today's Date is: $d"
n=`cal | grep    -nw $d | cut -d ":"    -f1`
echo $n $d
if [ $d -le 9 ]
then
    cal | sed "$n s/4/*/"
else
    cal | sed "$n s/$d/**/"
```

```
if [ $# -ne 3 ]
then
  echo "Please Enter Filename, Star and End Line In Argument"
else
  echo "Content Of File "
  cat $1
  echo "\n"
  if [ $2 -le $3 ]
  then
    sed -n "$2,$3 p" $1
  else
    echo "The Order Is Wrong"
  fi
fi
```

```
if [ $# -eq 1 ]
then
   sed 's/.\{40\}/&\\/g' <$1> ofile
   echo "Appending a \ after every 40th Character"
   cat ofile
else
   echo "Please Enter Argument"
fi
```

```
BEGIN{
  da="312831303130313130313031"
  mo="JANFEBMARAPRMAYJUNJULAUGSEPOCTNOVDEC"
  dd=substr(ARGV[1],1,2)
  mm=substr(ARGV[1],4,2)
  yy=substr(ARGV[1],7,4)
  l=length(ARGV[1])
  if(yy%4==0)
  {
    da="312931303130313130313031"
  if(dd < substr(da,2*mm-1,2) | | mm < 12 | | l==4)
    printf ("%d-%s-%d",dd,substr(mo,3*mm-2,3),yy)
  }
  else
    printf "Invalid Date"
}
```

```
if (data[$0]++ == 0)
    {
        line[++count]=$0
    }

END{
    for (i=1; i<= count; i++)
        {
            printf "%s\n",line[i]
        }
}</pre>
```

```
BEGIN {
    printf "Total number of books each category\n";
    printf "----\n"

} {
    b[$1]+=$2
}
END{
    for(item in b)
    {
       printf "%-15s %s %5d \n", item , "=", b[item];
       total+=b[item];
    }
    printf "%-15s %s %5s \n", "total books", "=",total;
}
```