```
┌──────────────────────────────────────────────────────────────────────┐
│                • MobaXterm Personal Edition v23.5 •                  │
│              (X server, SSH client and network tools)                │
│                                                                      │
│ ➤ Your computer drives are accessible through the /drives path       │
│                                                                      │
│ ➤ Your DISPLAY is set to 192.168.43.217:0.0                          │
│                                                                      │
│ ➤ When using SSH, your remote DISPLAY is automatically forwarded     │
│                                                                      │
│ ➤ Each command status is specified by a special symbol (✓ or ✗)      │
│                                                                      │
│                                                                      │
│ • Important:                                                         │
│ This is MobaXterm Personal Edition. The Professional edition         │
│ allows you to customize MobaXterm for your company: you can add      │
│ your own logo, your parameters, your welcome message and generate    │
│ either an MSI installation package or a portable executable.         │
│ We can also modify MobaXterm or develop the plugins you need.        │
│ For more information: https://mobaxterm.mobatek.net/download.html    │
└──────────────────────────────────────────────────────────────────────┘
```

```
06/03/2024 ► 22:31.34 ► /home/mobaxterm ► cd university_shell

✓

06/03/2024 ► 22:31.42 ► /home/mobaxterm/university_shell ► cat
p2.sh
echo "enter file name"
read x
readlink -f $x


✓

06/03/2024 ► 22:31.49 ► /home/mobaxterm/university_shell ► cat
p3.sh
echo "1.sort"
echo "2.execute two commands together"
echo "3.print message"
echo "4.version of unix"
echo "5.help of cat command"
echo "Enter your choice"
read ch
case $ch in
1)sort p2_abc.txt > p2_xyz.txt;;
2)date && cal;;
3)echo -e " This is a \n Three line \n message";;
4)uname -r ;;
5)man cat;;
esac

✓
```

```
 06/03/2024 ► 22:31.55 ► /home/mobaxterm/university_shell ► cat
p4.sh
echo "1.disp hidden file"
echo "2.delete direc with files"
echo "3.interactive copy"
echo "4.interactive deletion of files"
echo "5.functionality of mv "
echo "enter your choice"
read a
case $a in
1)ls -a;;
2)rm -r p4_abc
 echo "direct removed";;
3)cp -i p4_file4.txt p4_file6.txt;; #create this two files before execution
4)rm -i p4_file4.txt p4_file6.txt
  echo "both files are removed" ;;
5)mv p4_file5.txt p4_file6.txt;;
esac

✓

 06/03/2024 ► 22:32.01 ► /home/mobaxterm/university_shell ► cat
p5.sh
echo "1.create p5_1.txt and store name,age,address"
echo "2.disp content"
echo "3. delete txo directory"
echo "4.sort numeric file"
echo "5.change the permission of file to 666"
echo "enter choice"
read ch
case $ch in
1)cat > p5_1.txt;;
2)cat p5_1.txt;;
3)rm -r newdir mydir
echo "both directory deleted";;
4)sort -n p5_1.txt;;
5)chmod 666 p5_1.txt;;
*)echo "invalid";;
esac

✓

 06/03/2024 ► 22:32.07 ► /home/mobaxterm/university_shell ► cat
p6.sh
echo "Enter File Name"
read f
if [ -e $f ]
then
    echo "Last modification time is "
    stat -c%y $f #-c%y is use for formatting
    #stat display last modification
else
    echo "file does not exist"
fi


✓
```

```
 06/03/2024 ► 22:32.12 ► /home/mobaxterm/university_shell ► cat
p7.sh

who | grep s*

✓

 06/03/2024 ► 22:32.17 ► /home/mobaxterm/university_shell ► cat
p8.sh
echo "Enter file name:"
read f
if [ -e $f ] #-e for exist
then
    if [ -s $f ] #-s show that file is greater than zero
    then
         echo "file is greater than zero"
    else
        rm $f
        echo "file removed"
    fi

else
    echo "file does not exists"

fi

✓

 06/03/2024 ► 22:32.23 ► /home/mobaxterm/university_shell ► cat
p9.sh
for i in `ls`
do
if [ -x $i ]
then
echo "$i"
fi
done

✓

 06/03/2024 ► 22:32.27 ► /home/mobaxterm/university_shell ► cat
p10.sh
date=`date +%D` #date
hr=`date +%H` #time
echo "Current date is :$date"
if (test $hr -lt 12)
then
echo " Current time is $hr AM"
echo " Good Morning"
elif (test $hr -gt 12) && (test $hr -lt 16)
then
echo "Good Afternoon"
echo "Current Time is:`expr $hr - 12`PM"
elif (test $hr -gt 16) && (test $hr -lt 20)
then
echo "Good Evening"
```

```
echo "current time is:`expr $hr - 12`PM"
else
echo "Good Night"
echo "current time is:`expr $hr - 12`PM"
fi
```

✓

```
 06/03/2024 ► 22:32.32 ► /home/mobaxterm/university_shell ► cat
p11.sh
f=0
d=0
for i in `ls`
 do
if [ -f $i ]
 then
 f=`expr $f + 1`
 fi
if [ -d $i ]
 then
    d=`expr $d + 1`
fi
done
echo " ordinary file $f"
echo " directory file $d"
```

✓

```
 06/03/2024 ► 22:32.56 ► /home/mobaxterm/university_shell ► cat
p12.sh
if [ $# -gt 0 ] #checs argument greater than zero or not
then
    if [ -f $1 ]
    then
        cat $1
    else
        echo "file not exists"
    fi
else
echo " enter arguement"
fi
```

✓

```
 06/03/2024 ► 22:33.00 ► /home/mobaxterm/university_shell ► cat
p13.sh
if [ $# -gt 0 ]
then
    if [ -d $1 ]
    then
        ls $1
    else
        echo " file is not a directory"
    fi
else
    echo "enter argument"
```

```
fi
```

✓

```
 06/03/2024 ► 22:33.04 ► /home/mobaxterm/university_shell ► cat
p14.sh
if [ $# -eq 0 ]
then
    echo "enter argument"
    exist
fi
if [ -e $1 ] && [ -x $1 ]
then
 echo " file exist or executable"
else
 echo "file does not exist or exwcutable"
fi
```

✓

```
 06/03/2024 ► 22:33.07 ► /home/mobaxterm/university_shell ► cat
p15.sh
for i in *
do
if [ -d $i ]
then
echo "$i"
fi
done
```

✓

```
 06/03/2024 ► 22:33.11 ► /home/mobaxterm/university_shell ► cat
p16.sh
f=0
d=0
for i in *
do
if [ -f $i ]
then
f=`expr $f + 1`
fi
if [ -d $i ]
then
d=`expr $d + 1`
fi
done
echo "ordinary files : $f "
echo "dictionary : $d"
```

✓

```
 06/03/2024 ► 22:33.14 ► /home/mobaxterm/university_shell ► cat
p17.sh
echo " enter file name "
read x
```

```
echo " enter second file name "
read y
if [ -e $x -a -e $y ] # a for and
then
echo " first file content "
cat $x
echo second file content
cat $y
cat $y >> $x
echo merged
cat $x
else
echo " file does not exist "
fi
```

✓

```
 06/03/2024 ► 22:33.18 ► /home/mobaxterm/university_shell ► cat
p18.sh
if [ -e $1 ]
then
 echo " displaying file contents :$1"
 cat $1 | more
 cp $1 $2
 echo "file copied successfully"
fi
```

✓

```
 06/03/2024 ► 22:33.21 ► /home/mobaxterm/university_shell ► cat
p19.sh
echo 1. calender of current year month
echo 2. display Good morning ,good afternoon ,good night accoroding to time
echo 3.username user home directory
echo 4. terminal name type
echo 5. machine name
echo 6. no of user currently logged in list of users who are currently
loged in
echo enter your choice
read ch
case $ch in
1)cal ;;
2)d=`date +"%H"`
if [ $d -lt 12 ]
then
echo good morning
elif [ $d -gt 12 ] && [ $d -lt 16 ]
then
echo Good Afternoon
else
echo Good evening
fi;;
3)echo username is $USER
echo user home directory is $HOME ;;
4)echo terminal details
```

```
tty;;
5)echo machine name is:
uname -m;;
6) echo "the number of user logged in are "
who | wc-1;;
*)esac
```

✓

```
 06/03/2024 ► 22:33.30 ► /home/mobaxterm/university_shell ► cat
p20.sh
echo 1. concate two strings
echo 2. rename a file
echo 3. deletes a file
echo 4. copy the file to specific location
echo enter your choice
read ch
case $ch in
1)echo enter first string
read a
echo enter second string
read b
s=$a$b
echo concated string :$s ;;
2)mv p20_abc.txt ABC.txt
echo file renamed;;
3)rm -f p20_xyz.txt
echo file deleted;;
4)cp p20_abc.txt p20_xyz.txt
echo file copied;;
*)echo invalid ;;
esac
```

✓

```
 06/03/2024 ► 22:33.36 ► /home/mobaxterm/university_shell ► cat
p21.sh
cat: can't open 'p21.sh': No such file or directory
```

✗

```
 06/03/2024 ► 22:33.41 ► /home/mobaxterm/university_shell ► cat
p22.sh
if [ $# -eq 0 ]
then
directory="$HOME"
else
directory="$1"
fi
if [ -d "$directory" ]
then
echo "contents of $directory:"
ls -l "$directory"
else
echo "Directory not found"
fi
```

✓

```
 06/03/2024 ► 22:33.45 ► /home/mobaxterm/university_shell ► cat
p23.sh
for file in c*
do
if [ -f "$file" ]
then
new_name="${file}111"
mv "$file" "$new_name"
echo "renamed : $file to $new_name"
fi
done
```

✓

```
 06/03/2024 ► 22:33.48 ► /home/mobaxterm/university_shell ► cat
p24.sh
f1=$1
f2=$2
if cmp $f1 $f2
then
echo "both files are same"
rm $f2
echo "file 2 is removed"
else
echo" both files are diffrent"
fi
```

✓

```
 06/03/2024 ► 22:33.51 ► /home/mobaxterm/university_shell ► cat
p25.sh
if [ $# -ne 2 ]
then
echo " enter both source and destination file name"
exit 1
fi
sdir="$1"
ddir="$2"
if [ ! -d "$sdir" ]
then
echo "error : source directory does not exist"
exit 1
fi
sdir="$1"
if [ ! -d "$ddir" ]
then
echo " destination directory not exist"
mkdir -p "$ddir" # -p means parent directory
fi
cp -r "$sdir"/* "$ddir"
echo "files copied from '$sdir' to '$ddir'."
```

✓

06/03/2024 ► 22:33.54 ► /home/mobaxterm/university_shell ► cat p26.sh

```
echo " 1.list home directory "
echo 2.date
echo 3.print working directory
echo 4.user logged in
echo enter choice
read ch
case $ch in
1) ls /home ;;
2) date ;;
3) pwd ;;
4) who am i ;;
*)echo " invalid choice" ;;
esac
```

✓

06/03/2024 ► 22:33.58 ► /home/mobaxterm/university_shell ► cat p27.sh

```
ls -d .[a-z]*
```

✓

06/03/2024 ► 22:34.12 ► /home/mobaxterm/university_shell ► cat p28.sh

```
echo "enter file name "
read x
echo "enter file name"
read y
cat $x > vertical_temp.txt
cat $y >> vertical_temp.txt
echo vertical
cat vertical_temp.txt
paste -d " " $x $y > horizontal_temp.txt
echo horizontal
cat horizontal_temp.txt
```

✓

06/03/2024 ► 22:34.16 ► /home/mobaxterm/university_shell ► cat p29.sh

```
echo enter file name:
read fn
cat $fn | tr -d " " #tr for translate char -d for remove space
```

✓

06/03/2024 ► 22:34.20 ► /home/mobaxterm/university_shell ► cat p30.sh

```
read -p "enter a date (yyyy-mm-dd):" input_date
if [[ ! $input_date=~^[0-9]{4}-[0-9]{2}-[0-9]{2}$ ]]
then
echo invalid date formate please use yyyy-mm-dd
exit 1
fi
```

```
#extract day
day=$(date -d"$input_date" +%u)
if [ $day -ge 1 ] && [ $day -le 5 ]
then
echo $input_date is a weekday[monday to friday]
else
echo $input_date is a weekend day
fi
```

✓

```
 06/03/2024 ► 22:34.26 ► /home/mobaxterm/university_shell ► cat
p31.sh
if [ $# -eq 0 ]
then
echo enter file name
exit
fi
echo enter a word for search
read w
for i in "$@"
do
if [ -f "$i" ]
then
echo searching for $w in $i:
grep -n "$w" "$i" || echo word not found
else
echo $i this file does not exist
fi
done
```

✓

```
 06/03/2024 ► 22:34.30 ► /home/mobaxterm/university_shell ► cat
p32.sh
ls -lt | head -2 | tail -1
#ls -lt used to list files in a directory
#head -2 first 2 lines
#tail-1 last 1 line
```

✓

```
 06/03/2024 ► 22:34.35 ► /home/mobaxterm/university_shell ► cat
p33.sh
echo enter the filename
read fn
ls -l $fn | cut -c 2-10
```

✓

```
 06/03/2024 ► 22:34.38 ► /home/mobaxterm/university_shell ► cat
p34.sh
cat: can't open 'p34.sh': No such file or directory
```

✗

```
 06/03/2024 ► 22:34.42 ► /home/mobaxterm/university_shell ► cat
```

```
p35.sh
echo 1. display all words of file in ascending order
echo 2. display a file in descending
echo 3. toggle all character of file
echo 4. display type of file
echo enter choice
read ch
echo enter file name
read fn
case $ch in
1)sort $fn ;;
2)sort -r $fn ;;
3)cat $fn | tr "[a-z] [A-Z]" "[A-Z] [a-z]";;
4)/bin/file "$fn" ;;
esac
```

✓

```
 06/03/2024 ► 22:34.48 ► /home/mobaxterm/university_shell ► cat
p36.sh
echo "enter the username"
read un
c=`who |grep -c $un` # grep -c count number of line matched
if [ $c -gt 0 ]
then
echo User is currently logged in
else
echo User is not currently logged in
fi
```

✓

```
 06/03/2024 ► 22:34.52 ► /home/mobaxterm/university_shell ► cat
p37.sh
echo 1.display file in ascending
echo 2.display file in descending
echo 3. display file in reverse
echo 4.toggle character
echo 5.display type of file
echo enter your choice
read ch
echo enter file name
read fn
case $ch in
1)sort $fn;;
2)sort -r $fn;;
3)rev $fn;;
4)cat $fn |tr "[a-z][A-Z]" "[A-Z][a-z]";;
5)file $fn;;
*)echo invalid
esac
```

✓

```
 06/03/2024 ► 22:34.55 ► /home/mobaxterm/university_shell ► cat
p38.sh
```

```
total_user=$(cat|etc|password|wc-1)
looged_in=$(who |wc-1)
echo total number of users:$total_user
echo no. of users currently logged in:$logged_in
```

✓

```
 06/03/2024 ► 22:35.03 ► /home/mobaxterm/university_shell ► cat
p39.sh
x=$(ls -i | wc -l)
echo -e "File Name \t\t Size \t Date \t Protection \t Owner "
for ((i=2;i<=x;i++))
do
s=$(ls -l | head -$i | tail -1 | tr -s " ")
#ls-l detailed information
#head takes first 1's value
#tail last line from output of head
#tr-s comparess spacing into single space
fn=$(echo "$s" | cut -d " " -f9)
#-d delimeter
#f9 9 th field filename
s1=$(echo "$s" | cut -d " " -f5)
#5th field size
d=$(echo "$s" | cut -d " " -f6)#date
p=$(echo "$s" | cut -d " " -f1)
o=$(echo "$s" | cut -d " " -f3)
echo -e "$fn\t\t $s1 \t $d \t $p \t $o"
done
```

✓

```
 06/03/2024 ► 22:35.08 ► /home/mobaxterm/university_shell ► cat
p40.sh
ls -ls | head -n 5
```

✓

```
 06/03/2024 ► 22:35.14 ► /home/mobaxterm/university_shell ►
```