

# OS Lab01

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## Question 1

Write a shell program to take input of your name and display the same.

### Solution

```
#!/bin/sh

echo "Enter your name"

read name

echo "Entered name: $name"
```

### Output

```
→ Lab02 git:(master) less Q1.sh
→ Lab02 git:(master) ./Q1.sh
Enter your name
Dipankar Das
Entered name: Dipankar Das
→ Lab02 git:(master) █
```

```
→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
├── passwd
├── Q10.sh
├── Q1.sh
├── Q2.sh
├── Q3.sh
├── Q4.sh
├── Q5.sh
├── Q6.sh
├── Q7.sh
└── Q8.sh
└── Q9.sh

0 directories, 14 files
→ ~
```

## Question 2

Write a shell program that multiply two numbers using the command line arguments

## Solution

```
#!/bin/sh

a=$1
b=$2

res=`echo $a *\ $b | bc`
echo "Res: $res"
```

## Output

The screenshot shows a terminal window with two panes. The left pane displays the command `./Q2.sh 3.4 5.7` and its output `Res: 19.3`. The right pane shows the directory structure of `Lab02` with files `file.txt`, `mycity.txt`, `myfile.sh`, `passwd`, and several shell scripts from `Q10.sh` down to `Q9.sh`. The command `tree` was run to generate this list.

```
↳ Lab02 git:(master) ./Q2.sh 3.4 5.7
Res: 19.3
↳ Lab02 git:(master) █

↳ Lab02 git:(master)
↳ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
    └── passwd
        └── Q10.sh
            ├── Q1.sh
            ├── Q2.sh
            ├── Q3.sh
            ├── Q4.sh
            ├── Q5.sh
            ├── Q6.sh
            ├── Q7.sh
            └── Q8.sh
                └── Q9.sh

0 directories, 14 files
↳ ~
```

## Question 3

Write a shell program to check whether a given number is even or odd.

## Solution

```
#!/bin/sh

echo "Enter a number"

read num

if [ `expr $num % 2` -eq 0 ]
then
    echo "Even number"
else
```

```
    echo "Odd number"
fi
```

## Output

```
→ Lab02 git:(master) ./Q3.sh
Enter a number
34
Even number
→ Lab02 git:(master) ./Q3.sh
Enter a number
56
Even number
→ Lab02 git:(master) ./Q3.sh
Enter a number
7
Odd number
→ Lab02 git:(master) █
```

```
→ Lab02 git:(master)
```

```
→ Lab02 git:(master)
```

```
→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
  ├── passwd
  ├── Q10.sh
  ├── Q1.sh
  ├── Q2.sh
  ├── Q3.sh
  ├── Q4.sh
  ├── Q5.sh
  ├── Q6.sh
  ├── Q7.sh
  ├── Q8.sh
  └── Q9.sh

0 directories, 14 files
→ ~
```

## Question 4

Write a shell program to find greatest and smallest among three given numbers using nested if

## Solution

```
#!/bin/sh

echo "Enter 3 number"

read a
read b
read c

if [ $a -lt $b ]
then
    if [ $a -lt $c ]
    then
        echo "smallest: $a"
    else
        echo "smallest: $c"
    fi
else
    if [ $b -lt $c ]
```

```

then
    echo "smallest: $b"
else
    echo "smallest: $c"
fi

if [ $a -gt $b ]
then
    if [ $a -gt $c ]
    then
        echo "largest: $a"
    else
        echo "largest: $c"
    fi
else
    if [ $b -gt $c ]
    then
        echo "largest: $b"
    else
        echo "largest: $c"
    fi
fi

```

## Output

```

→ Lab02 git:(master) less Q4.sh
→ Lab02 git:(master) ./Q4.sh
Enter 3 number
3
4
6
smallest: 3
largest: 6
→ Lab02 git:(master) ./Q4.sh
Enter 3 number
6
7
3
smallest: 3
largest: 7
→ Lab02 git:(master)

```

```
→ Lab02 git:(master)
```

```

→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
passwd
Q10.sh
Q1.sh
Q2.sh
Q3.sh
Q4.sh
Q5.sh
Q6.sh
Q7.sh
Q8.sh
Q9.sh

0 directories, 14 files
→ ~

```

## Question 5

Write a shell program to check whether a given user is currently logged in or not.

## Solution

```
#!/bin/sh

echo "enter the username"

read usr

currUsr=$(whoami)

if [ "$usr" = "$currUsr" ]
then
    echo "Currently logged in"
else
    echo "Currently not logged in"
fi
```

## Output

The terminal window shows two sessions. The left session runs the script Q5.sh, which asks for a username and checks if it matches the current user. The right session lists files in a directory.

```
→ Lab02 git:(master) less Q5.sh
→ Lab02 git:(master) ./Q5.sh
enter the username
dd
Currently not logged in
→ Lab02 git:(master) ./Q5.sh
enter the username
dipankar
Currently logged in
→ Lab02 git:(master) █
```

```
→ Lab02 git:(master) whoami
dipankar
→ Lab02 git:(master)
```

```
→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
├── passwd
├── Q10.sh
├── Q1.sh
├── Q2.sh
├── Q3.sh
├── Q4.sh
├── Q5.sh
├── Q6.sh
├── Q7.sh
└── Q8.sh
└── Q9.sh

0 directories, 14 files
→ ~
```

## Question 6

Write a shell program to display the Date in "dd/mm/yyyy" format and the time in "hour:minute:second AM/PM timezone" with a greeting message like Good Morning, Good Evening etc. based on the current time

## Solution

```
#!/bin/bash
```

```

currHour=$(date +%H)
currDate=$(date +%x)
currTime=$(date +%X)

if [ "$currHour" -lt "12" ]; then
    echo "Good Morning"

elif [ "$currHour" -ge "12" -a "$currHour" -le "18" ]; then
    echo "Good Afternoon"

else
    echo "Good Night"
fi

echo "It's $currTime of $currDate"

```

## Output

The terminal window displays two sessions. The left session shows the execution of a shell script named Q6.sh, which prints 'Good Morning' and the current date and time. The right session shows the output of the 'whoami' command, which displays the user name 'dipankar', and a directory tree command ('tree') showing the contents of a 'Lab02' directory.

```

→ Lab02 git:(master) ./Q6.sh
Good Morning
It's 11:46:24 AM IST of 05/02/22
→ Lab02 git:(master) ./Q6.sh
Good Morning
It's 11:46:29 AM IST of 05/02/22
→ Lab02 git:(master) ./Q6.sh
Good Morning
It's 11:46:30 AM IST of 05/02/22
→ Lab02 git:(master)
→ Lab02 git:(master) █

→ Lab02 git:(master) whoami
dipankar
→ Lab02 git:(master)

→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
├── passwd
├── Q10.sh
├── Q1.sh
├── Q2.sh
├── Q3.sh
├── Q4.sh
├── Q5.sh
└── Q6.sh
├── Q7.sh
└── Q8.sh
└── Q9.sh

0 directories, 14 files
→ ~

```

## Question 7

Write a shell program to enter the mark secured by a student in a particular subject. Based on the grading system of our university, find and display the grade (i.e. from "O" to "F") secured by the student in that subject

## Solution

```

#!/bin/bash

echo "Enter the marks for a subject"

```

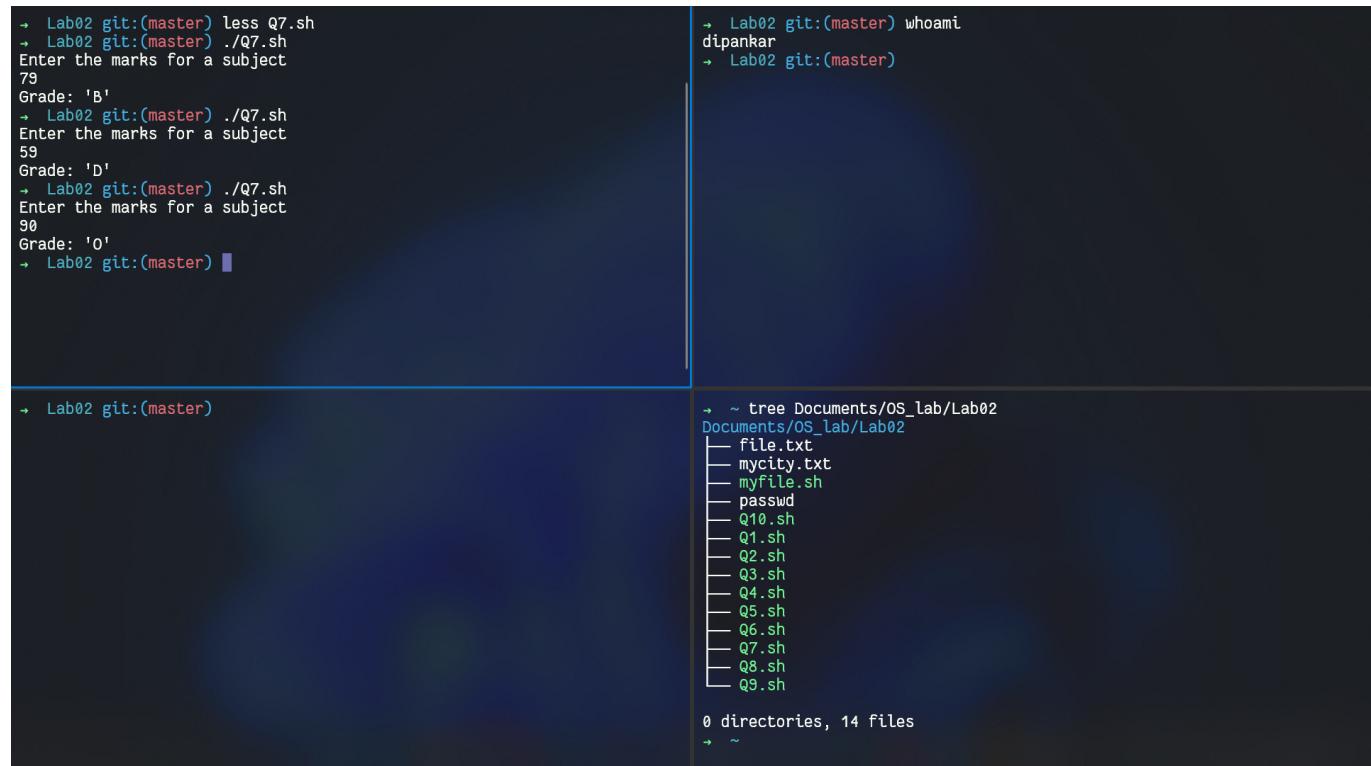
```

read marks

if [ $marks -ge 90 ]; then
    echo "Grade: 'O'"
elif [ $marks -ge 80 ]; then
    echo "Grade: 'A'"
elif [ $marks -ge 70 ]; then
    echo "Grade: 'B'"
elif [ $marks -ge 60 ]; then
    echo "Grade: 'C'"
elif [ $marks -ge 50 ]; then
    echo "Grade: 'D'"
elif [ $marks -ge 40 ]; then
    echo "Grade: 'E'"
else
    echo "Grade: 'F'"
fi

```

## Output



```

→ Lab02 git:(master) less Q7.sh
→ Lab02 git:(master) ./Q7.sh
Enter the marks for a subject
79
Grade: 'B'
→ Lab02 git:(master) ./Q7.sh
Enter the marks for a subject
59
Grade: 'D'
→ Lab02 git:(master) ./Q7.sh
Enter the marks for a subject
90
Grade: 'O'
→ Lab02 git:(master) █

→ Lab02 git:(master) whoami
dipankar
→ Lab02 git:(master)

→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
└── mycity.txt
    └── myfile.sh
        ├── passwd
        ├── Q10.sh
        ├── Q1.sh
        ├── Q2.sh
        ├── Q3.sh
        ├── Q4.sh
        ├── Q5.sh
        ├── Q6.sh
        ├── Q7.sh
        └── Q8.sh
            └── Q9.sh

0 directories, 14 files
→ ~

```

## Question 8

Write a shell program to fetch the data of a particular student (based on the row information, i.e., ex. The student present in the 3rd row of the file) from a stored file. Then calculate and display his total mark and the aggregate percentage secured in a semester. The file contains student roll no, name , and marks of five differ subjects in a semester

## Solution

```

#!/bin/bash

# marks=$(sed -ne 3,7p file.txt)
# echo "$marks"

m1=$(sed -ne '3,3p' file.txt)
m2=$(sed -ne '4,4p' file.txt)
m3=$(sed -ne '5,5p' file.txt)
m4=$(sed -ne '6,6p' file.txt)
m5=$(sed -ne '7,7p' file.txt)

echo "Hello, $(sed -ne '1,2p' file.txt)"

total=`expr $m1 + $m2 + $m3 + $m4 + $m5`
per=`echo $total \/ 5 | bc -l`
echo "Total: $total"
echo "Percentage: $per%"

```

## Output

<pre> → Lab02 git:(master) less Q8.sh → Lab02 git:(master) ./Q8.sh Hello, 20051554 Dipankar Das Total: 372 Percentage: 74.40000000000000% → Lab02 git:(master) █ </pre>	<pre> → Lab02 git:(master) whoami dipankar → Lab02 git:(master)  → ~ tree Documents/OS_lab/Lab02 Documents/OS_lab/Lab02 ├── file.txt └── mycity.txt     └── myfile.sh         └── passwd             ├── Q10.sh             ├── Q1.sh             ├── Q2.sh             ├── Q3.sh             ├── Q4.sh             ├── Q5.sh             ├── Q6.sh             ├── Q7.sh             ├── Q8.sh             └── Q9.sh  0 directories, 14 files → ~ </pre>
---	---

## Question 9

Write a shell program to take the input of a file name and check whether the file exists or not. If the file exists then display the last column of every record of the file (Assume that no. of columns in each record of the file may vary) in ascending order.

## Solution

```
#!/bin/bash

echo "Enter the fileName"

read fname

if [ -f "$fname" ]; then
    echo "File Exist"
    echo "Contents:"
    txt=`cut -d " " -f 5 $fname | sort` 
    echo "$txt"

else
    echo "File Does not exist"
fi
```

## Output

```
→ Lab02 git:(master) less Q9.sh
→ Lab02 git:(master) ./Q9.sh
Enter the fileName
passwd
File Exist
Contents:
dfsdasd
scsc
→ Lab02 git:(master) ./Q9.sh
Enter the fileName
dd
File Does not exist
→ Lab02 git:(master)

→ Lab02 git:(master) cat file.txt
20051554
Dipankar Das
45
68
90
89
80

→ Lab02 git:(master)

→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
├── file.txt
├── mycity.txt
└── myfile.sh
└── passwd
└── Q10.sh
└── Q1.sh
└── Q2.sh
└── Q3.sh
└── Q4.sh
└── Q5.sh
└── Q6.sh
└── Q7.sh
└── Q8.sh
└── Q9.sh

0 directories, 14 files
→ ~
```

## Question 10

Write a menu based shell program that will carry out the following file management operations based on the specified choice value. 1 - List files, 2 - Create directory, 3 – Change directory, 4 – Remove directory, 5 - Create file, 6 - Copy file, 7 – remove file.

## Solution

```
#!/bin/bash
```

```
echo "Enter [ 1 ] List files"
echo "Enter [ 2 ] create dir"
echo "Enter [ 3 ] change dir"
echo "Enter [ 4 ] remove dir"
echo "Enter [ 5 ] create file"
echo "Enter [ 6 ] copy file"
echo "Enter [ 7 ] remove file"

read choice

if [ $choice -eq 1 ]; then
# assuming it is the curr dir
ls -la

elif [ $choice -eq 2 ]; then
    echo "Enter the directory name"
    read dirN
    `mkdir $dirN`
    ls -la

elif [ $choice -eq 3 ]; then
    echo "Enter the directory name"
    read dirN
    cd $dirN
    pwd

elif [ $choice -eq 4 ]; then
    echo "Enter the directory name"
    read dirN
    `rm -Ri $dirN`
    ls -la

elif [ $choice -eq 5 ]; then
    echo "Enter the file name"
    read fileN
    `touch $fileN`
    ls -l

elif [ $choice -eq 6 ]; then
    echo "Enter the file name"
    read fileN
    `cp -v $fileN copy_${fileN}`
    ls -l

elif [ $choice -eq 7 ]; then
    echo "Enter the file name"
    read fileN
    `rm -i $fileN`
    ls -l

else
    echo "Wrong Choice"
fi
```

# Output

```

→ Lab02 git:(master) ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
1
total 72
drwxr-xr-x 2 dipankar dipankar 4096 Feb  4 21:19 .
drwxr-xr-x 5 dipankar dipankar 4096 Feb  3 12:38 ..
-rw-r--r-- 1 dipankar dipankar  38 Feb  4 19:10 file.txt
-rw-r--r-- 1 dipankar dipankar   0 Feb  4 21:18 mycity.txt
-rw-r--r-- 1 dipankar dipankar 239 Feb  3 13:21 myfile.sh
-rw-r--r-- 1 dipankar dipankar  51 Feb  4 20:55 passwd
-rw-r--r-- 1 dipankar dipankar 908 Feb  4 21:19 Q10.sh
-rw-r--r-- 1 dipankar dipankar 12288 Feb  4 21:06 .Q10.sh.swp
-rw-r--r-- 1 dipankar dipankar  73 Feb  3 13:26 Q1.sh
-rw-r--r-- 1 dipankar dipankar  64 Feb  3 13:46 Q2.sh
-rw-r--r-- 1 dipankar dipankar 125 Feb  3 13:37 Q3.sh
-rw-r--r-- 1 dipankar dipankar 428 Feb  3 13:56 Q4.sh
-rw-r--r-- 1 dipankar dipankar 167 Feb  4 18:40 Q5.sh
-rw-r--r-- 1 dipankar dipankar 280 Feb  4 18:58 Q6.sh
-rw-r--r-- 1 dipankar dipankar 376 Feb  4 19:05 Q7.sh
-rw-r--r-- 1 dipankar dipankar 374 Feb  4 19:41 Q8.sh
-rw-r--r-- 1 dipankar dipankar 202 Feb  4 20:57 Q9.sh
→ Lab02 git:(master)

→ Lab02 git:(master) ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
2
Enter the directory name
hello
total 76
drwxr-xr-x 3 dipankar dipankar 4096 Feb  5 11:50 .
drwxr-xr-x 5 dipankar dipankar 4096 Feb  3 12:38 ..
-rw-r--r-- 1 dipankar dipankar  38 Feb  4 19:10 file.txt
drwxr-xr-x 2 dipankar dipankar 4096 Feb  5 11:50 hello
-rw-r--r-- 1 dipankar dipankar  51 Feb  4 21:18 mycity.txt
-rw-r--r-- 1 dipankar dipankar 239 Feb  3 13:21 myfile.sh
-rw-r--r-- 1 dipankar dipankar  64 Feb  4 20:55 passwd
Documents/OS_lab/Lab02
└── file.txt
    ├── hello
    ├── mycity.txt
    ├── myfile.sh
    ├── passwd
    ├── Q10.sh
    ├── Q1.sh
    ├── Q2.sh
    ├── Q3.sh
    ├── Q4.sh
    ├── Q5.sh
    ├── Q6.sh
    ├── Q7.sh
    ├── Q8.sh
    └── Q9.sh
1 directory, 14 files
→ ~

→ Lab02 git:(master) ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
3
Enter the directory name
hello
/home/dipankar/Documents/OS_lab/Lab02/hello
→ Lab02 git:(master) ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
4
Enter the directory name
hello
rm: remove directory 'hello'? yes
total 72
drwxr-xr-x 2 dipankar dipankar 4096 Feb  5 11:51 .
drwxr-xr-x 5 dipankar dipankar 4096 Feb  3 12:38 ..
-rw-r--r-- 1 dipankar dipankar  38 Feb  4 19:10 file.txt
-rw-r--r-- 1 dipankar dipankar   0 Feb  4 21:18 mycity.txt
-rw-r--r-- 1 dipankar dipankar 239 Feb  3 13:21 myfile.sh
-rw-r--r-- 1 dipankar dipankar  51 Feb  4 20:55 passwd
-rw-r--r-- 1 dipankar dipankar 908 Feb  4 21:19 Q10.sh
-rw-r--r-- 1 dipankar dipankar 12288 Feb  4 21:06 .Q10.sh.swp
-rw-r--r-- 1 dipankar dipankar  73 Feb  3 13:26 Q1.sh
-rw-r--r-- 1 dipankar dipankar  64 Feb  3 13:46 Q2.sh
-rw-r--r-- 1 dipankar dipankar 125 Feb  3 13:37 Q3.sh
-rw-r--r-- 1 dipankar dipankar 428 Feb  3 13:56 Q4.sh
-rw-r--r-- 1 dipankar dipankar 167 Feb  4 18:40 Q5.sh
-rw-r--r-- 1 dipankar dipankar 280 Feb  4 18:58 Q6.sh
-rw-r--r-- 1 dipankar dipankar 376 Feb  4 19:05 Q7.sh
→ ~ tree Documents/OS_lab/Lab02
Documents/OS_lab/Lab02
└── file.txt
    ├── mycity.txt
    ├── myfile.sh
    ├── passwd
    ├── Q10.sh
    ├── Q1.sh
    ├── Q2.sh
    ├── Q3.sh
    ├── Q4.sh
    ├── Q5.sh
    ├── Q6.sh
    ├── Q7.sh
    └── Q9.sh
0 directories, 14 files
→ ~

```

```
→ Lab02 git:(master) x ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
6
Enter the file name
mycity.txt
./Q10.sh: line 44: 'mycity.txt': command not found
total 60
-rw-r--r-- 1 dipankar dipankar 45 Feb 5 11:55 copy_mycity.txt
-rw-r--r-- 1 dipankar dipankar 38 Feb 4 19:10 file.txt
-rw-r--r-- 1 dipankar dipankar 45 Feb 5 11:53 mycity.txt
-rwxr--r-- 1 dipankar dipankar 239 Feb 3 13:21 myfile.sh
-rw-r--r-- 1 dipankar dipankar 51 Feb 4 20:55 passwd
-rwxr--r-- 1 dipankar dipankar 908 Feb 4 21:19 Q10.sh
-rwxr--r-- 1 dipankar dipankar 73 Feb 3 13:26 Q1.sh
-rwxr--r-- 1 dipankar dipankar 64 Feb 3 13:46 Q2.sh
-rwxr--r-- 1 dipankar dipankar 125 Feb 3 13:37 Q3.sh
-rwxr--r-- 1 dipankar dipankar 428 Feb 3 13:56 Q4.sh
-rwxr--r-- 1 dipankar dipankar 167 Feb 4 18:40 Q5.sh
-rwxr--r-- 1 dipankar dipankar 280 Feb 4 18:58 Q6.sh
-rwxr--r-- 1 dipankar dipankar 376 Feb 4 19:05 Q7.sh
-rwxr--r-- 1 dipankar dipankar 374 Feb 4 19:41 Q8.sh
-rwxr--r-- 1 dipankar dipankar 202 Feb 4 20:57 Q9.sh
→ Lab02 git:(master) x
```

```
→ Lab02 git:(master) x cat mycity.txt
jamshedpur
new delhi
kolkata
chennai
mumbai
→ Lab02 git:(master) x cat copy_mycity.txt
jamshedpur
new delhi
kolkata
chennai
mumbai
→ Lab02 git:(master) x
```

```
Documents/OS_lab/Lab02
├── copy_mycity.txt
└── file.txt
    ├── mycity.txt
    └── myfile.sh
    ├── passwd
    ├── Q10.sh
    ├── Q1.sh
    ├── Q2.sh
    ├── Q3.sh
    ├── Q4.sh
    ├── Q5.sh
    ├── Q6.sh
    ├── Q7.sh
    ├── Q8.sh
    └── Q9.sh
```

0 directories, 15 files  
→ ~

```
→ Lab02 git:(master) x ./Q10.sh
Enter [ 1 ] List files
Enter [ 2 ] create dir
Enter [ 3 ] change dir
Enter [ 4 ] remove dir
Enter [ 5 ] create file
Enter [ 6 ] copy file
Enter [ 7 ] remove file
7
Enter the file name
mycity.txt
rm: remove regular file 'mycity.txt'? yes
total 56
-rw-r--r-- 1 dipankar dipankar 45 Feb 5 11:55 copy_mycity.txt
-rw-r--r-- 1 dipankar dipankar 38 Feb 4 19:10 file.txt
-rwxr--r-- 1 dipankar dipankar 239 Feb 3 13:21 myfile.sh
-rw-r--r-- 1 dipankar dipankar 51 Feb 4 20:55 passwd
-rwxr--r-- 1 dipankar dipankar 908 Feb 4 21:19 Q10.sh
-rwxr--r-- 1 dipankar dipankar 73 Feb 3 13:26 Q1.sh
-rwxr--r-- 1 dipankar dipankar 64 Feb 3 13:46 Q2.sh
-rwxr--r-- 1 dipankar dipankar 125 Feb 3 13:37 Q3.sh
-rwxr--r-- 1 dipankar dipankar 428 Feb 3 13:56 Q4.sh
-rwxr--r-- 1 dipankar dipankar 167 Feb 4 18:40 Q5.sh
-rwxr--r-- 1 dipankar dipankar 280 Feb 4 18:58 Q6.sh
-rwxr--r-- 1 dipankar dipankar 376 Feb 4 19:05 Q7.sh
-rwxr--r-- 1 dipankar dipankar 374 Feb 4 19:41 Q8.sh
-rwxr--r-- 1 dipankar dipankar 202 Feb 4 20:57 Q9.sh
→ Lab02 git:(master) x
```

```
→ Lab02 git:(master) x cat mycity.txt
jamshedpur
new delhi
kolkata
chennai
mumbai
→ Lab02 git:(master) x cat copy_mycity.txt
jamshedpur
new delhi
kolkata
chennai
mumbai
→ Lab02 git:(master) x
```

```
Documents/OS_lab/Lab02
├── copy_mycity.txt
└── file.txt
    ├── mycity.txt
    └── myfile.sh
    ├── passwd
    ├── Q10.sh
    ├── Q1.sh
    ├── Q2.sh
    ├── Q3.sh
    ├── Q4.sh
    ├── Q5.sh
    ├── Q6.sh
    ├── Q7.sh
    ├── Q8.sh
    └── Q9.sh
```

0 directories, 15 files  
→ ~