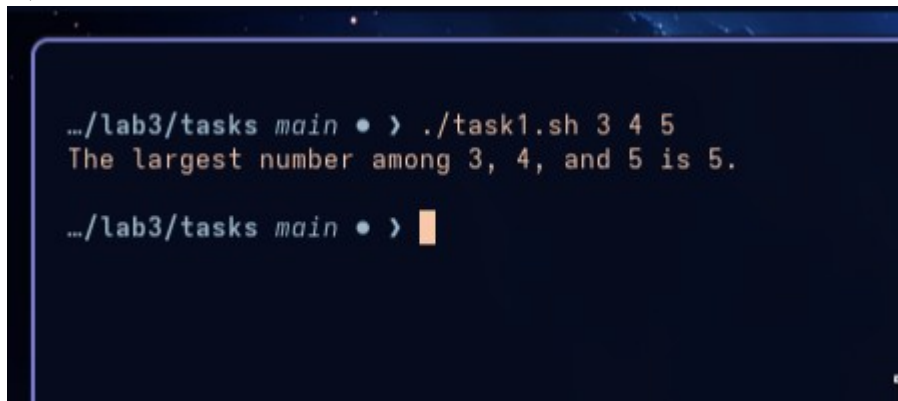


## OS Lab 3 Tasks

1)

A terminal window with a dark blue background and light blue text. The prompt is '.../lab3/tasks main • >'. The user enters './task1.sh 3 4 5'. The output is 'The largest number among 3, 4, and 5 is 5.'. The prompt returns to '.../lab3/tasks main • >' with a cursor. A small 'T' icon is in the bottom right corner.

```
.../lab3/tasks main • > ./task1.sh 3 4 5
The largest number among 3, 4, and 5 is 5.

.../lab3/tasks main • > █
```

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

```
num1=$1
```

```
num2=$2
```

```
num3=$3
```

```
max=$num1
```

```
printmax() {
```

```
    printf "The largest number among $num1, $num2, and $num3 is $max.\n"
```

```
}
```

```
if [[ $num1 -gt $num2 ]]; then
```

```
    if [[ $num1 -gt $num3 ]]; then
```

```
        max=$num1
```

```
    else
```

```
        max=$num3
```

```
    fi
```

```
else
```

```
    if [[ $num2 -gt $num3 ]]; then
```

```
        max=$num2
```

```
    else
```

```
        max=$num3
```

```
    fi
```

```
fi
```

```
printmax
```

2)

```
.../lab3/tasks main • > ./task2.sh file.txt
File exists!
Lines: 5
Characters: 63

.../lab3/tasks main • > █
```

//file.txt

Hello, this is a file.

It has 5 lines.

And a few characters.

// task2.sh

#!/bin/bash

fname=\$1

if [[ -e "\$fname" ]]; then

printf "File exists!\n"

printf "Lines: "

wc -l < "\$fname"

printf "Characters: "

wc -m < "\$fname"

else

printf "File doesn't exist!\n"

fi

3)

```

.../lab3/tasks main • > ./task3.sh .
Dir exists!
.hidden.txt

.../lab3/tasks main • > ls -a
Permissions Size User Date Modified Name
.rw-r--r-- 0 f4ll3n 6 Feb 09:53 .hidden.txt
.rw-r--r-- 63 f4ll3n 6 Feb 11:15 file.txt
.rwxr--r-- 359 f4ll3n 6 Feb 09:52 task1.sh
.rwxr--r-- 209 f4ll3n 6 Feb 09:52 task2.sh
.rwxr--r-- 129 f4ll3n 6 Feb 10:01 task3.sh
.rwxr--r-- 134 f4ll3n 6 Feb 10:07 task4.sh
.rwxr--r-- 367 f4ll3n 6 Feb 11:06 task5.sh

.../lab3/tasks main • >

```

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

```
dname=$1
```

```
if [[ -d "$dname" ]]; then
```

```
    printf "Dir exists!\n"
```

```
    ls .*
```

```
else
```

```
    printf "File doesn't exist!\n"
```

```
fi
```

4)

```

.../lab3/tasks main • > ./task4.sh
Enter a number: 19
19 is odd.

.../lab3/tasks main • > ./task4.sh
Enter a number: 10
10 is even.

.../lab3/tasks main • >

```

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

```
printf "Enter a number: "
```

```
read num
```

```
if (( $num % 2 == 0 )); then
```

```
    echo "$num is even."
```

```
else
```

```
    echo "$num is odd."
```

```
fi
```

5)

```
.../lab3/tasks main • X ./task5.sh .  
Directory '.' has been backed to '../project_backup_20260206112334'.  
Number of files backed: 7  
  
.../lab3/tasks main • ? > ls  
Permissions Size User Date Modified Name  
-rw-r--r-- 63 f4ll3n 6 Feb 11:15 file.txt  
-rwxr--r-- 359 f4ll3n 6 Feb 09:52 task1.sh  
-rwxr--r-- 209 f4ll3n 6 Feb 09:52 task2.sh  
-rwxr--r-- 129 f4ll3n 6 Feb 10:01 task3.sh  
-rwxr--r-- 134 f4ll3n 6 Feb 10:07 task4.sh  
-rwxr--r-- 367 f4ll3n 6 Feb 11:06 task5.sh  
  
.../lab3/tasks main • ? > ls ..  
Permissions Size User Date Modified Name  
drwxr-xr-x - f4ll3n 6 Feb 11:23 project_backup_20260206112334  
drwxr-xr-x - f4ll3n 6 Feb 11:06 tasks  
-rw-r--r-- 272 f4ll3n 6 Feb 09:52 backup.sh  
-rw-r--r-- 319 f4ll3n 6 Feb 09:52 lab3.sh  
  
.../lab3/tasks main • ? > ls ../project_backup_20260206112334  
Permissions Size User Date Modified Name  
-rw-r--r-- 63 f4ll3n 6 Feb 11:23 file.txt  
-rwxr--r-- 359 f4ll3n 6 Feb 11:23 task1.sh  
-rwxr--r-- 209 f4ll3n 6 Feb 11:23 task2.sh  
-rwxr--r-- 129 f4ll3n 6 Feb 11:23 task3.sh  
-rwxr--r-- 134 f4ll3n 6 Feb 11:23 task4.sh  
-rwxr--r-- 367 f4ll3n 6 Feb 11:23 task5.sh  
  
.../lab3/tasks main • ? > 
```

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

```
dname=$1
```

```
backup_dir="project_backup_$(date +%Y%m%d%H%M%S)"
```

```
if [ -d "$dname" ]; then
```

```
    cp -r "$dname" "../$backup_dir/"
```

```
    printf "Directory '$dname' has been backed to '../$backup_dir'.\n"
```

```
    printf "Number of files backed: "
```

```
    find "../$backup_dir/$dname" -mindepth 1 -maxdepth 1 | wc -l
```

```
else
```

```
    printf "Directory '$dname' does not exist.\n"
```

```
fi
```