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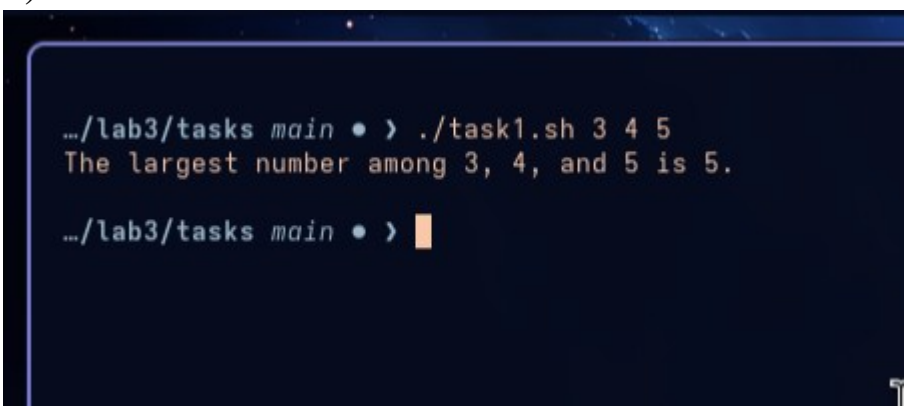
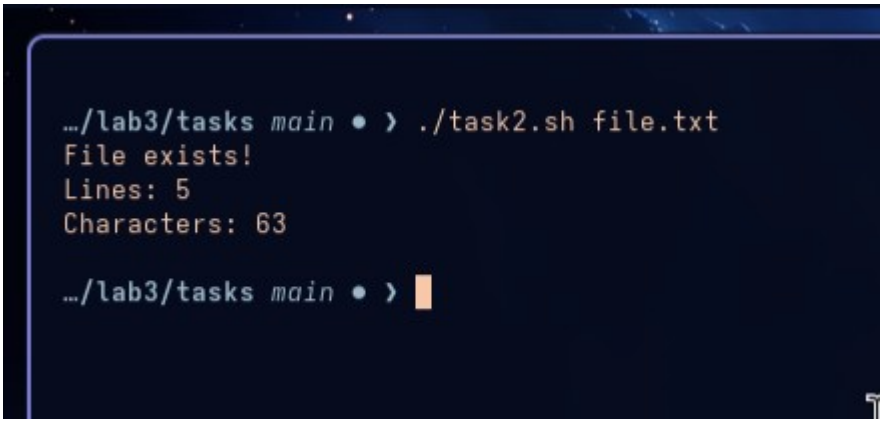
OS Lab 3 Tasks

1)




```
#!/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)



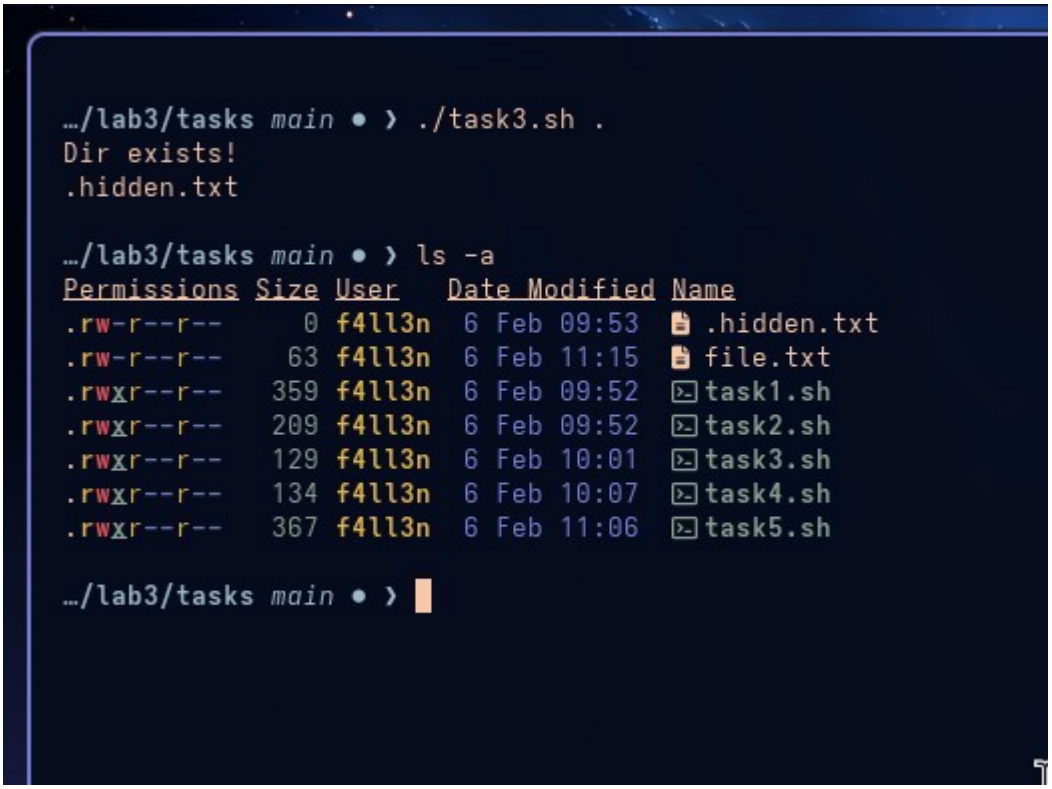
//file.txt
Hello, this is a file.

It has 5 lines.

And a few characters.

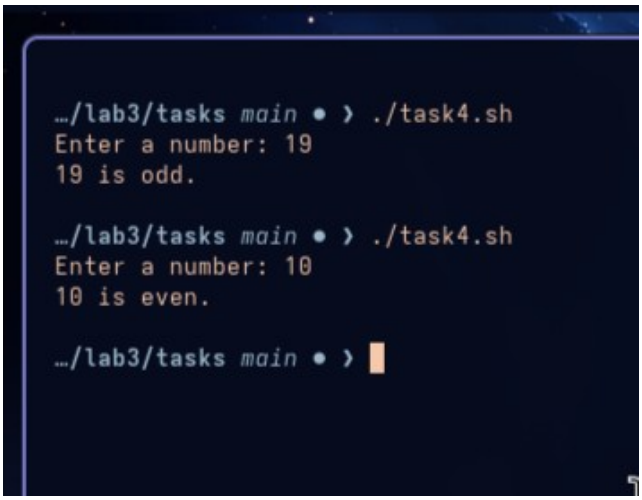
```
// task2.sh
#!/bin/bash

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)



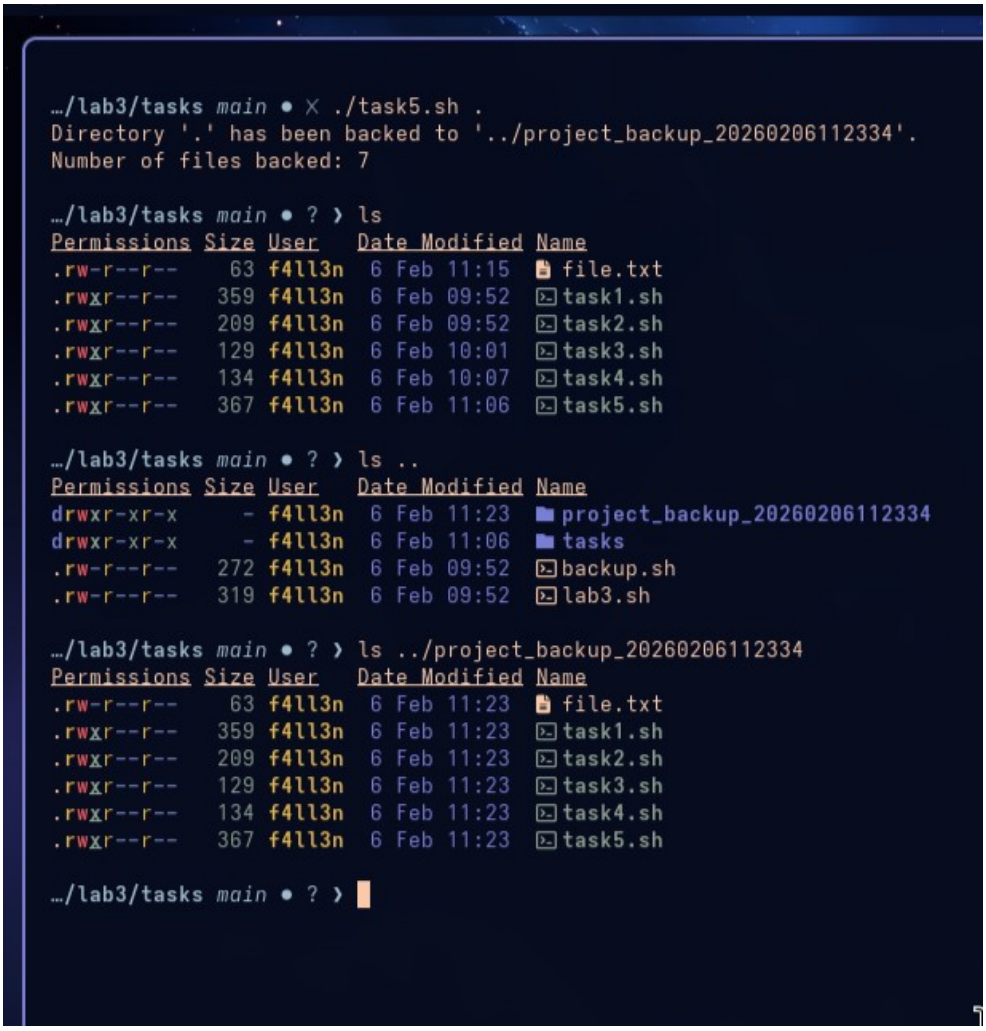

```
#!/bin/bash

dname=$1

if [[ -d "$dname" ]]; then
    printf "Dir exists!\n"
    ls .*
else
    printf "File doesn't exist!\n"
fi
```

4)



```
#!/bin/bash

printf "Enter a number: "
read num

if (( $num % 2 == 0 )); then
    echo "$num is even."
else
    echo "$num is odd."
fi
```

5)




```
#!/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
```