**Nome:** Diogo Miguel Quintino Rogado Cardoso Fonseca

**Nº:** 79858

**P1.**

**a)**

*#!/bin/bash*

read -p "extension: " ext

ls \*.$ext

**b)**

*#!/bin/bash*

find . -type d -size +*$1*

**c)**

*#!/bin/bash*

read -p "select a start date: " start

read -p "select a end date: " end

find . -type f -newermt $start ! -newermt $end

**d)**

*#!/bin/bash*

awk -F: '{print $1}' /etc/passwd

**e)**

*#!/bin/bash*

read -p "Expression: " expr

for file in $(ls)

do

    if [[ -f $file ]] && grep -q $expr $file

    then

        echo $file

    fi

done

**P2.**

**a)**

*#!/bin/bash*

factorial ()

{

    if [ *$1* -le 1 ]

    then

        echo *$1*

    else

        echo $((*$1* \* $(factorial $((*$1* - 1)))))

    fi

}

echo $(factorial *$1*)

**b)**

*#!/bin/bash*

for (( i=0; i<=*$2*; i++))

do

    result=$(($i \* *$1*))

    echo "$i x *$1* = $result"

done

**P3.**

**a)**

*#!/bin/bash*

read -p "current extension: " curr\_ext

read -p "new extension: " new\_ext

for file in $(find . -regex ".\*\.${curr\_ext}")

do

    filename="${file##\*/}"

    prefix="${filename%.\*}"

    mv $filename "${prefix}.${new\_ext}"

done

**b)**

*#!/bin/bash*

read -p "file 1: " file1

read -p "file 2: " file2

cat $file1 >> file3.txt

cat $file2 >> file3.txt

cat file3.txt | wc -l

**P4.**

*#!/bin/bash*

date -d "yesterday *${1}*/3/1" +"%d days"

**P5.**

*#!/bin/bash*

for dir in /bin /etc

do

    echo "${dir}: "

    ls $dir

    sleep 2

done

**P6.**

*#!/bin/bash*

i=0

while [ $i -lt 20 ]

do

    ((i++))

    echo $i

done

**P7.**

*#!/bin/bash*

i=0

until [ $i -eq 20 ]

do

    ((i++))

    echo $i

done

**P8.**

*#!/bin/bash*

sum ()

{

    sum=$((*$1*+*$2*))

    echo $sum

}

echo "Result: $(sum *$1* *$2*)"

**Referências:**

<https://www.freecodecamp.org/news/bash-scripting-tutorial-linux-shell-script-and-command-line-for-beginners/>

<https://linuxconfig.org/bash-scripting-tutorial>

<https://www.w3schools.io/terminal/bash-tutorials/>

<https://www.tutorialspoint.com/unix/shell_scripting.htm>