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## **TP08 OS**

### **Ex1**

```
#!/bin/bash
while ;; do
    read -p "Input the name of file with extension: " file
    ext=${file##*\.}
    if [ $ext == "c" ]; then
        echo "It is c file"
    elif [ $ext == "txt" ]; then
        echo "It is txt file"
    elif [ $ext == "sh" ]; then
        echo "It is shell script file"
    elif [ $ext == "jpg" ]; then
        echo "It is jpg file"
    elif [ $ext == "png" ]; then
        echo "It is png file"
    else
        echo "It must be directory or not type of file"
    fi
done
```

### Ex2 renamejpg

```
#!/bin/bash

cd /home/rothadapravith/Documents

dname=`date '+%F'`

echo $dname

for filename in *.jpg
do

    newfile=$dname-$filename

    mv $filename $newname

done
```

### Ex3 extensionfile

```
#!/bin/bash

read -p "Please enter a file extension: " EXTENSION

if [ ${#EXTENSION} -eq 0 ]

then

    echo "No file extension provided. Aborting."

    exit 1

fi

PREFIX=$(date +%Y%m%d)

read -p "Please enter a file prefix: (Press ENTER for ${PREFIX}). " NEW_PREFIX

if [ ${#NEW_PREFIX} -ne 0 ]

then

    PREFIX="${NEW_PREFIX}"

fi

shopt -s nullglob

for FILENAME in *.${EXTENSION}

do

    NEW_FILENAME="${PREFIX}${FILENAME}"

    echo "Renaming ${FILENAME} to ${NEW_FILENAME}."

    mv "${FILENAME}" "${NEW_FILENAME}"

done

shopt -u nullglob
```

#### Ex4 Christmastree

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

```
trap "tput reset; tput cnorm; exit" 2
```

```
clear
```

```
tput civis
```

```
lin=2
```

```
col=$((tput cols) / 2)
```

```
c=$((col-1))
```

```
est=$((c-2))
```

```
color=0
```

```
tput setaf 2; tput bold
```

```
# Tree
```

```
for ((i=1; i<20; i+=2))
```

```
{
```

```
    tput cup $lin $col
```

```
    for ((j=1; j<=i; j++))
```

```
    {
```

```
        echo -n \*
```

```
    }
```

```
    let lin++
```

```
    let col--
```

```
}
```

```
tput sgr0; tput setaf 3
```

```
# Trunk
```

```
for ((i=1; i<=2; i++))
```

```
{
```

```
    tput cup $((lin++)) $c
```

```
    echo 'mWm'
```

```
}
```

```
new_year=$(date +%Y')
let new_year++
tput setaf 1; tput bold
tput cup $lin $((c - 9)); echo MERRY CHRISTMAS DAPRAVITH
tput cup $((lin + 1)) $((c - 8)); echo WISH YOU ALL THE BEST
tput cup $((lin + 2)) $((c - 10)); echo And lots of CODE in $new_year!
```

```
#tput setaf 7; tput bold
#tput cup $lin $((c + 7));
#echo DARIKA
```

```
let c++
k=1
```

```
# Lights and decorations
while true; do
    for ((i=1; i<=35; i++)) {
        # Turn off the lights
        [ $k -gt 1 ] && {
            tput setaf 2; tput bold
            tput cup ${line[$k-1]$i} ${column[$k-1]$i}; echo \*
            unset line[$k-1]$i; unset column[$k-1]$i # Array cleanup
        }
    }
done
```

```
li=$((RANDOM % 9 + 3))
start=$((c-li+2))
co=$((RANDOM % (li-2) * 2 + 1 + start))
tput setaf $color; tput bold # Switch colors
tput cup $li $co
echo o
line[$k$i]=$li
column[$k$i]=$co
color=$((color+1)%8)
```

```
# Flashing text

sh=1

for l in C O D E
do

    tput cup $((lin+2)) $((c+sh))

    echo $l

    let sh++

    sleep 0.01

done

ch=6

for n in D A P R A V I T H
do

    tput cup $lin $((c+ch))

    echo $n

    let ch++

    sleep 0.01

done

}

k=$((k % 2 + 1))

done
```