

# **Task B - 3**

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# - What should it do? -

- In specified directory (and subdirs) find files with given name extension\* and:
  - *copy* them with another given extension or
  - *rename* them - change their extension to another given or
  - just *remove* them.

## - And how can it be used? -

```
suffix_handle.sh [ -c | -m | -r ] ext1 ext2
```

- *-c* for copy,
  - *-m* for rename and
  - *-r* for remove
- 
- *ext1* and *ext2* are the desired extensions, where *ext2* is not required by *-r*.

# - What output can it produce? -

- For copy and rename a list of files changed (*before => after*).
- For remove a list of files removed.
- And some error output... (nobody's perfect)

# - Let's code it -

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

- Check `-v` and `-h` parameters
- „Parse&check“:
  - directory (read permissions)
  - operation parameter
  - extension parameters
- Process the files

# - Second argument -

- Desired operation – just validate it.

```
48 # Determine the desired operation
49 if [ -z "$2" ]; then
50     echo "Missing arguments." >&2
51     exit 3
52 fi
53 operation="$2"
54
55 # Check operation validity
56 case "$operation" in
57     "$COPY") ;;
58     "$RENAME") ;;
59     "$REMOVE") ;;
60     *) echo "Invalid $operation argument." >&2; exit 4;
61 esac
```

# - Third and maybe fourth arg -

- Check arg number according to the operation.

```
63 # Check number of arguments
64 if [ "$operation" == "$REMOVE" ] && [ $# -ne 3 ]; then
65     echo "Expecting directory and two arguments." >&2
66     exit 3
67 elif [ "$operation" != "$REMOVE" ] && [ $# -ne 4 ]; then
68     echo "Expecting directory and 3 arguments." >&2
69     exit 3
70 fi
71
72 # Load file extension(s)
73 ext1="$3"
74 if [ "$operation" != "$REMOVE" ]; then
75     ext2="$4"
76 fi
```

# - Process the files (THIS IS IT) -

- Finally make the desired operation.

```
78 # Process the files
79 OLDIFS=$IFS
80 IFS=$(echo -n -e "\n\b")
81 for oldfile in $(find "$directory" -name "$ext1"); do
82     newfile="${oldfile%$ext1}$ext2"
83     if [ "$operation" = "$COPY" ]; then
84         if ! [ -r "$oldfile" ]; then
85             echo "$oldfile" >&2
86             continue
87         fi
88         cp "$oldfile" "$newfile"
89         echo "$oldfile => $newfile"
90     elif [ "$operation" = "$RENAME" ]; then
91         mv "$oldfile" "$newfile"
92         echo "$oldfile => $newfile"
93     elif [ "$operation" = "$REMOVE" ]; then
94         rm -f "$oldfile"
95         echo "$oldfile"
96     fi
97 done
98 IFS=$OLDIFS
```



- **100 ! (feel like a champion)** -



```
| 100 exit 0
```