

ITMO University

The Faculty of Software Engineering and Computer Systems

System software basics

Practical task №3
Shell-programming

Variant 210

Done by
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Task 1.

Write shell sccript which prints list of users who can read given file

Script:

```
#!/bin/sh

if [[ -f $1 ]]; then
    line=$(ls -n $1)
    uid=$(echo "$line" | awk '{print $3}')
    gid=$(echo "$line" | awk '{print $4}')
    up=$(echo "$line" | awk -F ' ' '{print $2}')
    gp=$(echo "$line" | awk -F ' ' '{print $5}')
    op=$(echo "$line" | awk -F ' ' '{print $8}')

    cat /etc/passwd | awk -v uid="$uid" -v gid="$gid" -v up="$up" -v
gp="$gp" -v op="$op" -F ':' '{if($3==uid && up=="r") {print $1} else if
($4==gid && gp=="r"){print $1} else if (op=="r"){print $1}}'

else
    echo "Error: Wrong file name"
    exit 1
fi
```

Task 2.

Write shell sccript which prints every directory where current user can search

Script

```
#!/bin/sh

curdir=$(pwd)
uid=$(id -u $USER)
gid=$(id -g $USER)

ls -n $curdir | awk -v uid="$uid" -v gid="$gid" '{if ($3==uid &&
$1~"^...x*"){print $9} else if ($4==gid && $1~"^.....x*") {print $9}
else if ($1~"*x$") {print $9}}'
```