

Assignment-5

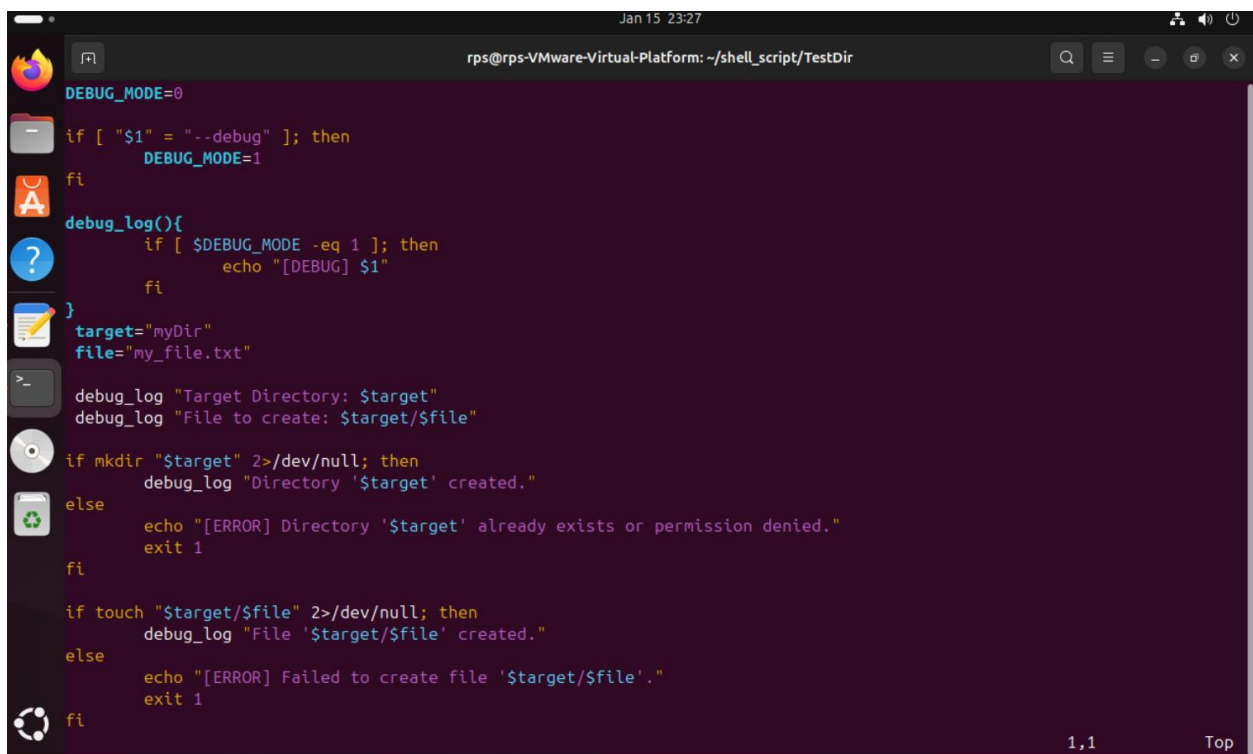
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Assignment 5: Modify the script to handle errors, such as the directory already existing or lacking permissions to create files.

Add a debugging mode that prints additional information when enabled.

Shell script code with the name of `handle_errors.sh`:



```
DEBUG_MODE=0

if [ "$1" = "--debug" ]; then
    DEBUG_MODE=1
fi

debug_log(){
    if [ $DEBUG_MODE -eq 1 ]; then
        echo "[DEBUG] $1"
    fi
}

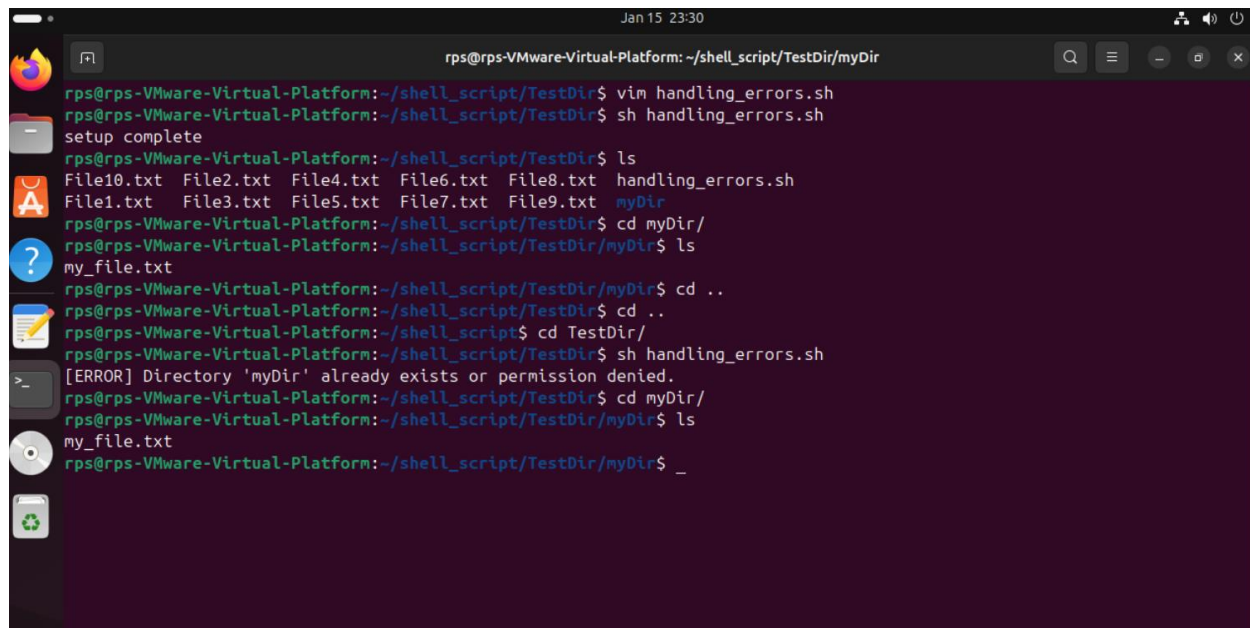
target="myDir"
file="my_file.txt"

debug_log "Target Directory: $target"
debug_log "File to create: $target/$file"

if mkdir "$target" 2>/dev/null; then
    debug_log "Directory '$target' created."
else
    echo "[ERROR] Directory '$target' already exists or permission denied."
    exit 1
fi

if touch "$target/$file" 2>/dev/null; then
    debug_log "File '$target/$file' created."
else
    echo "[ERROR] Failed to create file '$target/$file'."
    exit 1
fi
```

Commands to run handle_errors.sh and checking its function:



A terminal window titled "rps@rps-VMware-Virtual-Platform: ~/shell_script/TestDir/myDir" with a timestamp of "Jan 15 23:30". The terminal shows the following sequence of commands and outputs:

```
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ vim handling_errors.sh
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ sh handling_errors.sh
setup complete
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ ls
File10.txt File2.txt File4.txt File6.txt File8.txt handling_errors.sh
File1.txt File3.txt File5.txt File7.txt File9.txt myDir
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ cd myDir/
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir/myDir$ ls
my_file.txt
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir/myDir$ cd ..
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ cd ..
rps@rps-VMware-Virtual-Platform:~/shell_script$ cd TestDir/
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ sh handling_errors.sh
[ERROR] Directory 'myDir' already exists or permission denied.
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir$ cd myDir/
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir/myDir$ ls
my_file.txt
rps@rps-VMware-Virtual-Platform:~/shell_script/TestDir/myDir$ _
```