

Bash script

```
#!/bin/bash

#functions

error_check (){
    if [ $? == 0 ]; then
        echo "The text file is created with name $1"
    else
        echo "error in creating file $1"
    fi
}

#variable

process_file="process_info.txt"
memory_file="memory_info.txt"
disk_file="disk_info.txt"
target_hostname="ahmed"
target_ip="127.0.0.1"

#creating the work directory

mkdir ~/code_testing
cd ~/code_testing

#listing process information, memory usage, current disk usage, and
log file

ps aux > $process_file
error_check $process_file
free -h > $memory_file
error_check $memory_file
df -h | awk '{ if (NR==1 || NR==4) { print $0 } }' > $disk_file
error_check $disk_file
cp /var/log/dmesg dmesg_backup

#checking for created files
if [ -e $process_file ] && [ -e $memory_file ] && [ -e $disk_file ] &&
[ -e dmesg_backup ]; then
    echo "The files created"
```

```
# compressing the files

tar -cvf info.tar disk_info.txt memory_info.txt
process_info.txt dmesg_backup >/dev/null
gzip info.tar

#sending the compressed file over the network

scp -r info.tar.gz $target_hostname@$target_ip:~

else
    echo "files not found"
fi
```

Result

```
mandark@ubuntu:~$ ./shared/bash_lab2.sh
The text file is created with name process_info.txt
The text file is created with name memory_info.txt
The text file is created with name disk_info.txt
The files created
ahmed@127.0.0.1's password:
info.tar.gz
100% 32KB 2.7MB/s 00:00
mandark@ubuntu:~$
```