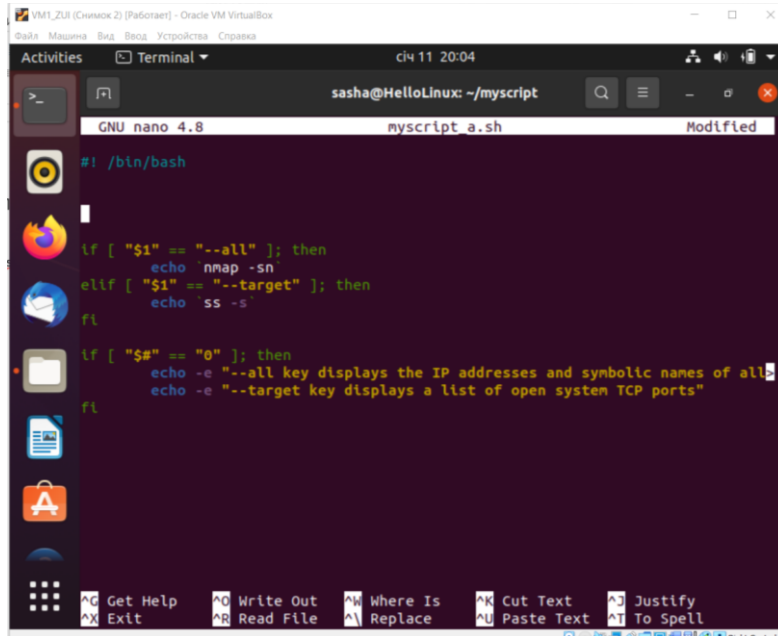


## Task 7.1

A

Create a script that uses the following keys: --all; --target.

Nano myscript\_a.sh



```
#!/bin/bash

if [ "$1" == "--all" ]; then
    echo nmap -sn
elif [ "$1" == "--target" ]; then
    echo ss -s
fi

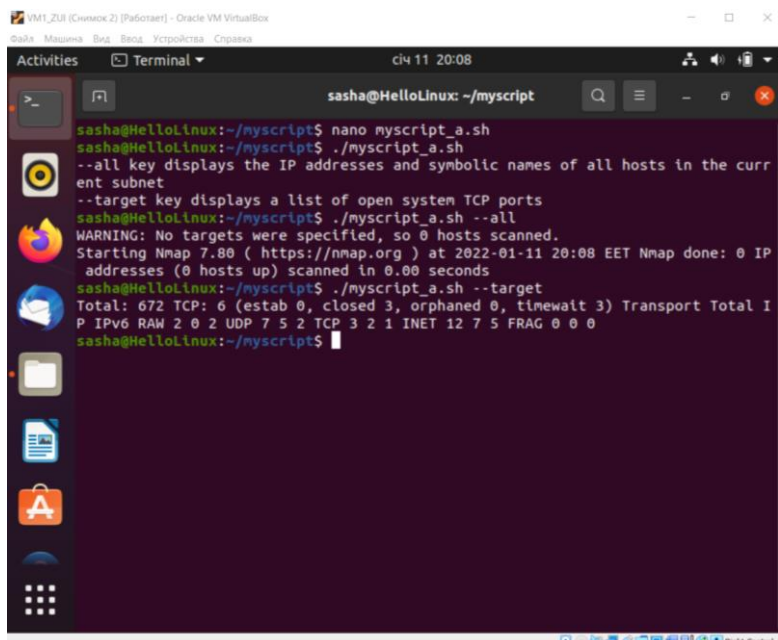
if [ "$2" == "0" ]; then
    echo -e "--all key displays the IP addresses and symbolic names of all"
    echo -e "--target key displays a list of open system TCP ports"
fi
```

Chmod a+x myscript\_a.sh

./myscript\_a.sh

./myscript\_a.sh --all

./myscript\_a.sh --target



```
sasha@HelloLinux: ~/myscript
sasha@HelloLinux:~/myscript$ nano myscript_a.sh
sasha@HelloLinux:~/myscript$ ./myscript_a.sh
--all key displays the IP addresses and symbolic names of all hosts in the current subnet
--target key displays a list of open system TCP ports
sasha@HelloLinux:~/myscript$ ./myscript_a.sh --all
WARNING: No targets were specified, so 0 hosts scanned.
Starting Nmap 7.80 ( https://nmap.org ) at 2022-01-11 20:08 EET Nmap done: 0 IP addresses (0 hosts up) scanned in 0.00 seconds
sasha@HelloLinux:~/myscript$ ./myscript_a.sh --target
Total: 672 TCP: 6 (estab 0, closed 3, orphaned 0, timewait 3) Transport Total I
P IPv6 RAW 2 0 2 UDP 7 5 2 TCP 3 2 1 INET 12 7 5 FRAG 0 0 0
sasha@HelloLinux:~/myscript$
```

**B**

**Script text:**

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

```
a=$(less /var/log/apache_logs.txt | grep -E -o '([0-9]{1,3}[\.]){3}[0-9]{1,3}' | sort | uniq -c | sort -gr)
```

```
if [ "$1" == "-a" ]; then
```

```
    echo $a
```

```
fi
```

```
b=$(less /var/log/apache_logs.txt | awk '{print $7}' | sort | uniq -c | sort -gr | head -n 5)
```

```
if [ "$1" == "-b" ]; then
```

```
    echo $b
```

```
fi
```

```
c=$(less /var/log/apache_logs.txt | grep -E -o '([0-9]{1,3}[\.]){3}[0-9]{1,3}' | awk '{print " Number of request " $1 " From IP " $2}' | sort | uniq -c | sort -gr)
```

```
if [ "$1" == "-c" ]; then
```

```
    echo $c
```

```
fi
```

```
d=$(less /var/log/apache_logs.txt | grep "404" | awk '{print $7}' | head -n 5)
```

```
if [ "$1" == "-d" ]; then
```

```
    echo $d
```

```
fi
```

```
e=$(less /var/log/apache_logs.txt | awk '{print $4}' | sort | uniq -c | sort -gr)
```

```
if [ "$1" == "-e" ]; then
```

```
    echo $e
```

```
fi
```

```
f=$(less /var/log/apache_logs.txt | grep "bot" | awk '{print $7}' | head -n 5)
```

```
if [ "$1" == "-f" ]; then
```

```
    echo $f
```

```
fi
```

```
if [ "$#" == "0" ]; then
```

```
echo "-a - From which ip were the most requests?"
```

```
echo "-b - What is the most requested page?"
```

```
echo "-c - How many requests were there from each ip?"
```

```
echo "-d - What non-existent pages were clients referred to?"
```

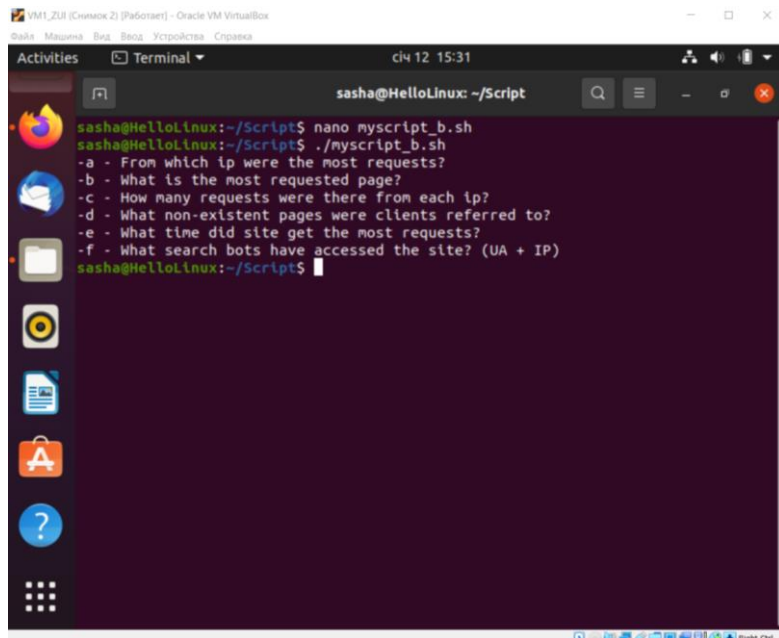
```
echo "-e - What time did site get the most requests?"
```

```
echo "-f - What search bots have accessed the site? (UA + IP)"
```

```
fi
```

#### 1. Run script

```
./myscript_b.sh
```

A screenshot of a terminal window titled "sasha@HelloLinux: ~/Script". The terminal shows the user running the command "nano myscript\_b.sh" and then "cat myscript\_b.sh". The output of the script is displayed, showing six lines of text: "-a - From which ip were the most requests?", "-b - What is the most requested page?", "-c - How many requests were there from each ip?", "-d - What non-existent pages were clients referred to?", "-e - What time did site get the most requests?", and "-f - What search bots have accessed the site? (UA + IP)". The terminal window is part of a desktop environment with a sidebar on the left containing icons for applications like Firefox, Nautilus, and the Dash. The top of the window shows system information like "VM1\_ZUI (Cinnamox 2) (Paforeset) - Oracle VM VirtualBox" and the time "12:15:31".

#### 2. From which ip were the most requests?

```
./myscript_b.sh -a
```

```

sasha@HelloLinux: ~/Script
482 66.249.73.135
364 46.105.14.53
357 130.237.218.86
273 75.97.9.59
113 50.16.19.13
102 209.85.238.199
99 68.180.224.225
84 100.43.83.137
83 208.115.111.72
82 198.46.149.143
74 208.115.113.88
65 2.0.0.4
65 1.8.1.4
65 108.171.116.194
60 65.55.213.73
60 208.91.156.11
56 66.249.73.185
52 50.139.66.106
50 86.76.247.183
50 14.160.65.22
43 93.17.51.134
42 208.43.252.200
41 199.168.96.66
41 183.179.22.186
41 144.76.194.187
40 210.13.83.18
40 209.17.114.78
39 59.163.27.11
39 115.112.233.75

```

3. What is the most requested page?

`./myscript_b.sh -b`

```

807 /favicon.ico
546 /style2.css
538 /reset.css
533 /images/jordan-80.png
516 /images/web/2009/banner.png
sasha@HelloLinux: ~/Script$

```

4. How many requests were there from each ip?

`./myscript_b.sh -c`

```

482 Number of request 66.249.73.135 From IP
364 Number of request 46.105.14.53 From IP
357 Number of request 130.237.218.86 From IP
273 Number of request 75.97.9.59 From IP
113 Number of request 50.16.19.13 From IP
102 Number of request 209.85.238.199 From IP
99 Number of request 68.180.224.225 From IP
84 Number of request 100.43.83.137 From IP
83 Number of request 208.115.111.72 From IP
82 Number of request 198.46.149.143 From IP
74 Number of request 208.115.113.88 From IP
65 Number of request 2.0.0.4 From IP
65 Number of request 1.8.1.4 From IP
65 Number of request 108.171.116.194 From IP
60 Number of request 65.55.213.73 From IP
60 Number of request 208.91.156.11 From IP
56 Number of request 66.249.73.185 From IP
52 Number of request 50.139.66.106 From IP
50 Number of request 86.76.247.183 From IP
50 Number of request 14.160.65.22 From IP
43 Number of request 93.17.51.134 From IP
42 Number of request 208.43.252.200 From IP
41 Number of request 199.168.96.66 From IP
41 Number of request 183.179.22.186 From IP
41 Number of request 144.76.194.187 From IP
40 Number of request 210.13.83.18 From IP
40 Number of request 209.17.114.78 From IP
39 Number of request 59.163.27.11 From IP

```

5. What non-existent pages were clients referred to?

`./myscript_b.sh -d`

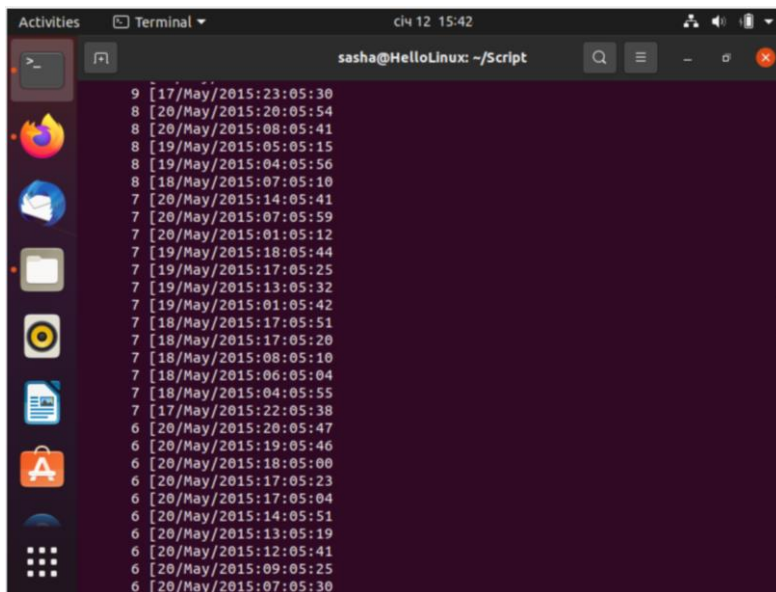
```

/doc/index.html?org/elasticsearch/action/search/SearchResponse.html
/files/logstash/logstash-1.3.2-monolithic.jar
/presentations/logstash-puppetconf-2012/images/office-space-printer-beat-down-gif.gif
/presentations/logstash-puppetconf-2012/images/office-space-printer-beat-down-gif.gif
/files/logstash/logstash-1.3.2-monolithic.jar
sasha@HelloLinux: ~/Script$

```

6. What time did site get the most requests?

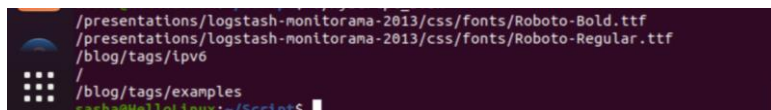
`./myscript_b.sh -e`



```
sasha@HelloLinux: ~/Script
9 [17/May/2015:23:05:30
8 [20/May/2015:20:05:54
8 [20/May/2015:08:05:41
8 [19/May/2015:05:05:15
8 [19/May/2015:04:05:56
8 [18/May/2015:07:05:10
7 [20/May/2015:14:05:41
7 [20/May/2015:07:05:59
7 [20/May/2015:01:05:12
7 [19/May/2015:18:05:44
7 [19/May/2015:17:05:25
7 [19/May/2015:13:05:32
7 [19/May/2015:01:05:42
7 [18/May/2015:17:05:51
7 [18/May/2015:17:05:20
7 [18/May/2015:08:05:10
7 [18/May/2015:06:05:04
7 [18/May/2015:04:05:55
7 [17/May/2015:22:05:38
6 [20/May/2015:20:05:47
6 [20/May/2015:19:05:46
6 [20/May/2015:18:05:00
6 [20/May/2015:17:05:23
6 [20/May/2015:17:05:04
6 [20/May/2015:14:05:51
6 [20/May/2015:13:05:19
6 [20/May/2015:12:05:41
6 [20/May/2015:09:05:25
6 [20/May/2015:07:05:30
```

7. What search bots have accessed the site? (UA + IP)

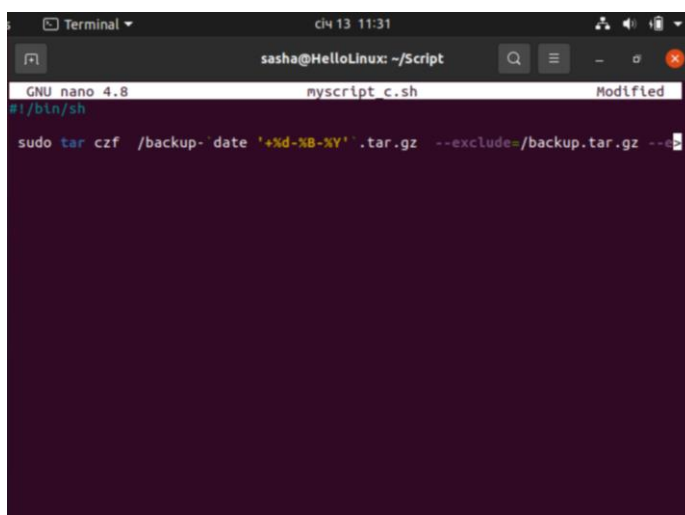
`./myscript_b.sh -f`



```
sasha@HelloLinux: ~/Script$
/presentations/logstash-monitorama-2013/css/fonts/Roboto-Bold.ttf
/presentations/logstash-monitorama-2013/css/fonts/Roboto-Regular.ttf
/blog/tags/ipv6
/
/blog/tags/examples
sasha@HelloLinux: ~/Script$
```

C

Create a script for system backup

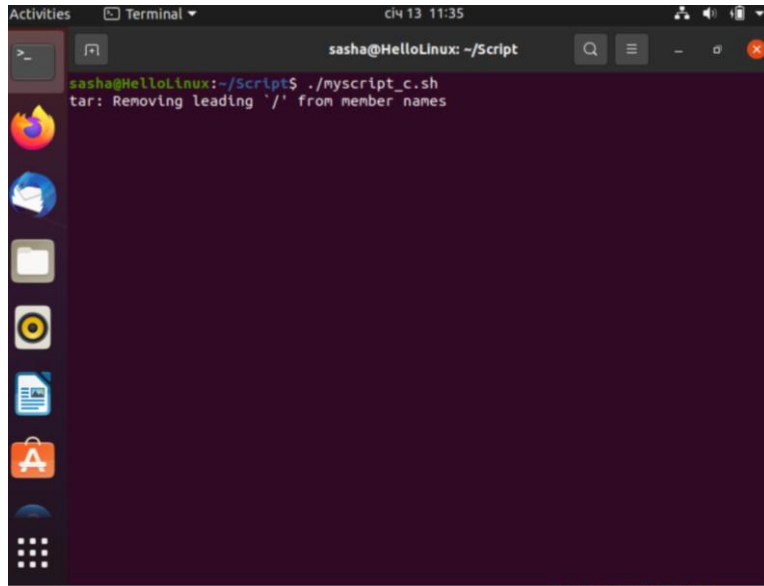


```
sasha@HelloLinux: ~/Script
GNU nano 4.8 myscript c.sh Modified
#!/bin/sh
sudo tar czf /backup-`date +%d-%B-%Y`.tar.gz --exclude=/backup.tar.gz --e
```

Add rights

Chmod a+x myscript\_c.sh

./myscript\_c.sh



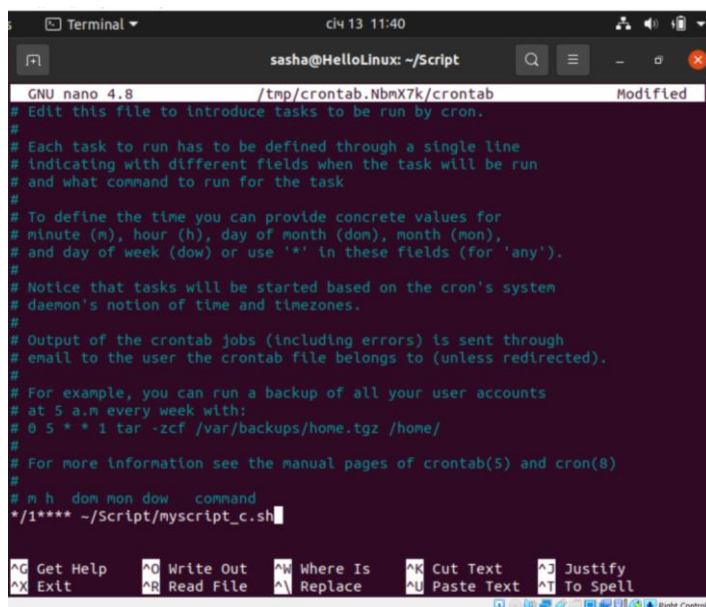
A terminal window titled 'Terminal' with the address bar showing 'sasha@HelloLinux: ~/Script'. The terminal output shows the command `./myscript_c.sh` being executed, followed by the message `tar: Removing leading '/' from member names`. The terminal has a dark purple background and a sidebar on the left with various application icons.

```
sasha@HelloLinux: ~/Script
sasha@HelloLinux:~/Script$ ./myscript_c.sh
tar: Removing leading '/' from member names
```

A backup is created with the date stored in the root

Add the command to run the script to

crontab with a start frequency of one minute



A terminal window titled 'Terminal' with the address bar showing 'sasha@HelloLinux: ~/Script'. The terminal shows the GNU nano 4.8 editor editing the file `/tmp/crontab.NbmX7k/crontab`. The file content includes instructions on how to use crontab, followed by a task definition: `*1**** ~/Script/myscript_c.sh`. The terminal has a dark purple background and a sidebar on the left with various application icons.

```
GNU nano 4.8 /tmp/crontab.NbmX7k/crontab Modified
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
*1**** ~/Script/myscript_c.sh
```