1. Crearea unui container de linux

```
PS C:\Users\Administrator\Desktop\Tremend\Ex1> docker pull ubuntu:latest
latest: Pulling from library/ubuntu
Digest: sha256:77906da86b60585ce12215807090eb327e7386c8fafb5402369e421f44eff17e
Status: Image is up to date for ubuntu:latest
docker.io/library/ubuntu:latest

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview ubuntu:latest
PS C:\Users\Administrator\Desktop\Tremend\Ex1> docker run -it --name ex_linux ubuntu:latest
root@994615cdb474:/# 
```

2. Crearea unui user

```
root@994615cdb474:/# useradd -m john
root@994615cdb474:/# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:100:65534::/nonexistent:/usr/sbin/nologin
andrei:x:1000:1000::/home/andrei:/bin/sh
liviu:x:1001:1001::/home/liviu:/bin/sh
popescu:x:1002:1002::/home/popescu:/bin/sh
john:x:1003:1003::/home/john:/bin/sh
root@994615cdb474:/#
```

```
$ exit
root@994615cdb474:/# su john
$ cd /home/john
$ mkdir tremend
$ cd tremend
$ pwd
/home/john/tremend
$ 
```

3. Copierea scriptului pe container

```
PS C:\Users\Administrator\Desktop\Tremend\Useful-Resources-main\Useful-Resources-main\1-linux> docker cp create_large_file.sh ex_linux:/home/john/tremen
d
Successfully copied 2.05kB to ex_linux:/home/john/tremend
PS C:\Users\Administrator\Desktop\Tremend\Useful-Resources-main\Useful-Resources-main\1-linux> |
```

```
$ cd tremend
$ pwd
/home/john/tremend
$ ls
create_large_file.sh
$ |
```

Rulam scriptul:

```
john:x:1003:1003::/home/john:/bin/sh
$ ./create_large_file.sh
50+0 records in
50+0 records out
52428800 bytes (52 MB, 50 MiB) copied, 0.0379364 s, 1.4 GB/s
mv: cannot stat 'lage_file': No such file or directory
$ nano create large file
```

Exista un typo in script. Instalez tool-urile necesare pentru a repara scriptul

```
$ exit
root@994615cdb474:/# apt-get update
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy InRelease [270 kB]
Get:3 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1624 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2048 kB]
Get:7 http://archive.ubuntu.com/ubuntu jammy/main amd64 Packages [1792 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [266 kB]
root@994615cdb474:/# apt-get install nano
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  hunspell
The following NEW packages will be installed:
  nano
0 upgraded, 1 newly installed, 0 to remove and 2 not upgraded.
```

```
create_large_file.sh   large_file
root@994615cdb474:/home/john/tremend# nano create_large_file.sh
root@994615cdb474:/home/john/tremend# cat create_large_file.sh
#!/bin/bash

dd if=/dev/zero of=large_file bs=1M count=50

mv large_file /home/john

root@994615cdb474:/home/john/tremend# |
```

Rulam din nou scriptul:

```
root@994615cdb474:/home/john/tremend# ./create_large_file.sh
50+0 records in
50+0 records out
52428800 bytes (52 MB, 50 MiB) copied, 0.0453427 s, 1.2 GB/s
root@994615cdb474:/home/john/tremend#
```

```
root@994615cdb474:/home/john/tremend# cd ..
root@994615cdb474:/home/john# ls
large_file  tremend
```

3. Script bash pentru passwd

Scriptul se numeste script.sh si necesita curl instalat pentru a functiona correct.

```
root@994615cdb474:/home/john# chmod +x script.sh
root@994615cdb474:/home/john# ls
large_file  script.sh  tremend
root@994615cdb474:/home/john#
```

```
root@994615cdb474:/home/john# ./script.sh
Script ran as root :)
The passwd file was found at /etc.
Print the home directory:
andrei  john  liviu
Users from passwd:
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
_apt
andrei
liviu
popescu
john
User count:
23
Input the username to find the home directory: john
Home directory for john is: /home/john
large_file  new_passwd  script.sh  script_final.sh  tremend
```

```
Enter the UID range: start =
1
end=
4
Users with UID between 1 and 4:
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
_apt
andrei
liviu
popescu
john
Users with /bin/bash or /bin/sh shell:
root
andrei
liviu
popescu
john
Replaced '/' with '\' in passwd and save the changed to new_passwd
Your private ip is: 172.17.0.2
Your public ip is: ███████
$
```