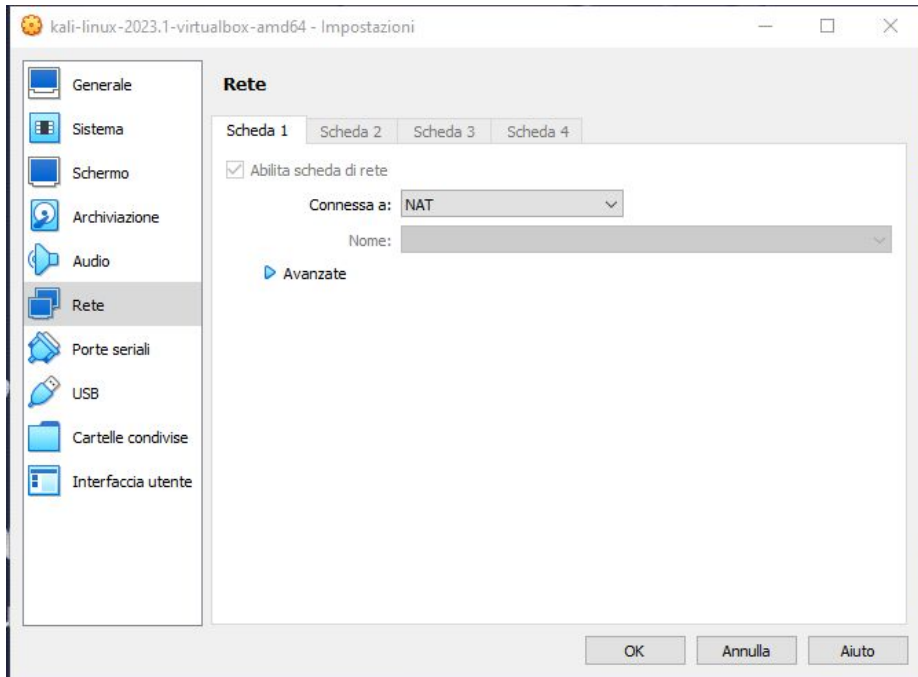


REPORT (19.05.2023), ANATOLIY PRYSYAZHNYUK

Mi collego ad internet con NAT, nel config del network cambio in DHCP e il restante lo metto come commento;

Riavvio il servizio network con: "sudo service networking restart"



```
File Actions Edit View Help
GNU nano 7.2 /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

auto eth0
iface eth0 inet static
address 192.168.32.100/24
gateway 192.168.32.1
#iface eth0 inet dhcp
```

```
kali@kali: ~
File Actions Edit View Help
GNU nano 7.2 /etc/network/interfaces *
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

auto eth0
#iface eth0 inet static
#address 192.168.32.100/24
#gateway 192.168.32.1
iface eth0 inet dhcp
```

```
kali@kali: ~
File Actions Edit View Help
(kali@kali)-[~]
$ sudo service networking restart
(kali@kali)-[~]
$
```

```
(kali@kali)-[~]
$ sudo nano /etc/network/interfaces
```

La fase di aggiornamento e di installazione:

```
(kali@kali)~$ sudo apt-get update
Get:1 http://kali.download/kali kali-rolling InRelease [41.2 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 Packages [19.3 MB]
Get:3 http://kali.download/kali kali-rolling/main amd64 Contents (deb) [44
.7 MB]
Get:4 http://kali.download/kali kali-rolling/non-free amd64 Packages [217
kB]
Get:5 http://kali.download/kali kali-rolling/non-free amd64 Contents (deb)
[928 kB]
Fetched 65.1 MB in 11s (6,002 kB/s)
Reading package lists ... Done
```

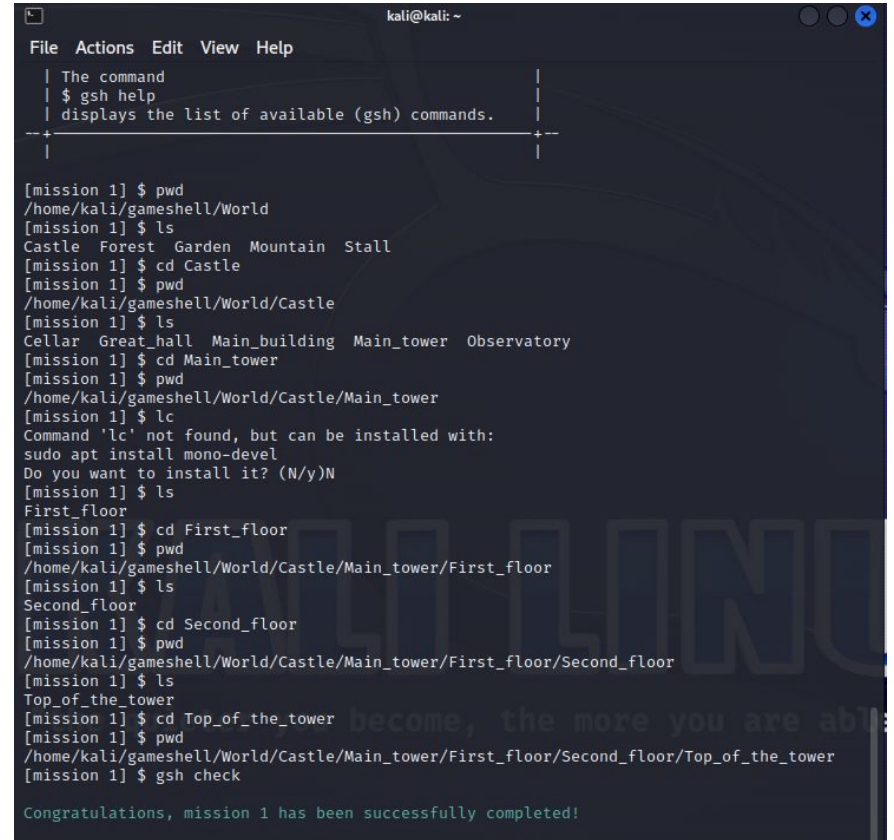
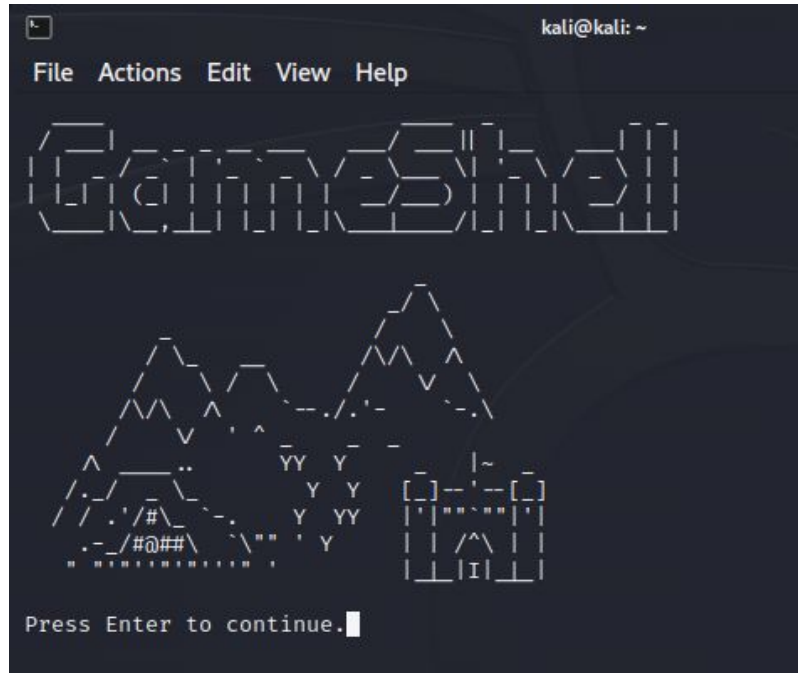
```
(kali@kali)~$ wget https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh
--2023-05-19 05:12:26-- https://github.com/phyver/GameShell/releases/download/latest/ga
mshell.sh
Resolving github.com (github.com)... 140.82.121.3
Connecting to github.com (github.com)|140.82.121.3|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2e65be/94
422621/c076717c-fef6-4ef7-ab6b-4f1303bca5e8?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Creden
tial=AKIAIWNJYAX4CSVEH53A%2F20230519%2Fus-east-1%2F%3F%2Faws4_request&X-Amz-Date=20230519T
091226Z&X-Amz-Expires=3006X-Amz-Signature=84d0c619c5c2e95d5801e1c9647b57e31a9e57903571f4b
7ba4f47cd0a9115d16X-Amz-SignedHeaders=host&actor_id=06key_id=06repo_id=944226216response-con
tent-disposition=attachment%3B%20filename%3Dgameshell.sh&response-content-type=applicati
on%2Foctet-stream [following]
--2023-05-19 05:12:26-- https://objects.githubusercontent.com/github-production-release-asset-2e65be/94422621/c076717c-fef6-4ef7-ab6b-4f1303bca5e8?X-Amz-Algorithm=AWS4-HMAC-SHA2
56&X-Amz-Credential=AKIAIWNJYAX4CSVEH53A%2F20230519%2Fus-east-1%2F%3F%2Faws4_request&X-Amz-
Date=20230519T091226Z&X-Amz-Expires=3006X-Amz-Signature=84d0c619c5c2e95d5801e1c9647b57e3
1a9e57903571f4b7ba4f47cd0a9115d16X-Amz-SignedHeaders=host&actor_id=06key_id=06repo_id=944
226216response-content-disposition=attachment%3B%20filename%3Dgameshell.sh&response-conte
nt-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.108.13
3, 185.199.110.133, 185.199.111.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)|185.199.108.1
33|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 202043 (197K) [application/octet-stream]
Saving to: 'gameshell.sh'

gameshell.sh      100%[====>] 197.31K  --.KB/s   in 0.02s

2023-05-19 05:12:26 (8.06 MB/s) - 'gameshell.sh' saved [202043/202043]
```

```
(kali@kali)~$ sudo apt install gettext man-db procs psmisc nano tree bsdmainutils x11-apps wget
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
man-db is already the newest version (2.11.2-2).
procs is already the newest version (2:4.0.2-3).
psmisc is already the newest version (23.6-1).
psmisc set to manually installed.
nano is already the newest version (7.2-1).
tree is already the newest version (2.1.0-1).
tree set to manually installed.
x11-apps is already the newest version (7.7+9).
x11-apps set to manually installed.
wget is already the newest version (1.21.3-1+b2).
The following packages were automatically installed and are no longer required:
bluez-firmware firmware-ath9k-htc firmware-atheros firmware-brcm80211
firmware-intel-sound firmware-iwlwifi firmware-libertas firmware-realtek
firmware-sof-signed firmware-ti-connectivity firmware-zd1211 kali-linux-firmware
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
ncal
Suggested packages:
calendar vacation mailutils autopoint gettext-doc libasprintf-dev libgettextpo-dev
The following NEW packages will be installed:
bsdmainutils gettext ncal
0 upgraded, 3 newly installed, 0 to remove and 77 not upgraded.
Need to get 1,326 kB of archives.
After this operation, 6,042 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://kali.download/kali kali-rolling/main amd64 ncal amd64 12.1.8 [19.7 kB]
Get:2 http://kali.download/kali kali-rolling/main amd64 bsdmainutils all 12.1.8 [5,952 B]
Get:3 http://kali.download/kali kali-rolling/main amd64 gettext amd64 0.21-12 [1,300 kB]
Fetched 1,326 kB in 1s (1,605 kB/s)
Selecting previously unselected package ncal.
(Reading database ... 402406 files and directories currently installed.)
Preparing to unpack .../archives/ncal_12.1.8_amd64.deb ...
Unpacking ncal (12.1.8) ...
Selecting previously unselected package bsdmainutils.
Preparing to unpack .../bsdmainutils_12.1.8_all.deb ...
Unpacking bsdmainutils (12.1.8) ...
Selecting previously unselected package gettext.
Preparing to unpack .../gettext_0.21-12_amd64.deb ...
Unpacking gettext (0.21-12) ...
Setting up gettext (0.21-12) ...
Setting up ncal (12.1.8) ...
Setting up bsdmainutils (12.1.8) ...
Processing triggers for libc-bin (2.36-9) ...
Processing triggers for man-db (2.11.2-2) ...
Processing triggers for kali-menu (2023.2.3) ...
```

Avvio il programma **gameshell** ed inizio ad eseguire i **vari livelli**:
Nel primo livello ci fanno spostare tra le varie directory, per arrivare alla directory chiamata: Top_of_the_tower



Codesti esercizi (1,2,3...) erano fatti per farci praticare gli spostamenti tra le directory:
utilizzando il comando `cd` (per spostarci), `ls` (per vedere le sottodirectory) e `pwd` (per vedere dove siamo ora):

```

kali@kali: ~
File Actions Edit View Help

| / | cd ..
| / | Move to the parent directory (one step back along the path
| / | to your current location).
| / |
| / | pwd
| / | See the path to your current location.
| / |
|_|_|

[mission 2] $ pwd
/home/kali/gameshell/World/Castle/Main_tower/First_floor/Second_floor/Top_of_the_tower
[mission 2] $ cd -
/home/kali/gameshell/World/Castle/Main_tower/First_floor/Second_floor
[mission 2] $ cd -
/home/kali/gameshell/World/Castle/Main_tower/First_floor/Second_floor/Top_of_the_tower
[mission 2] $ cd ..
[mission 2] $ pwd
/home/kali/gameshell/World/Castle/Main_tower/First_floor/Second_floor
[mission 2] $ cd ..
[mission 2] $ pwd
/home/kali/gameshell/World/Castle/Main_tower/First_floor
[mission 2] $ cd ..
[mission 2] $ pwd
/home/kali/gameshell/World/Castle/Main_tower
[mission 2] $ ls
First_floor
[mission 2] $ cd ..
[mission 2] $ pwd
/home/kali/gameshell/World/Castle
[mission 2] $ ls
Cellar Great_hall Main_building Main_tower Observatory
[mission 2] $ cd Cellar
[mission 2] $ pwd
/home/kali/gameshell/World/Castle/Cellar
[mission 2] $ ls
barrel_of_apples
[mission 2] $ gsh check

Congratulations, mission 2 has been successfully completed!

```

```

+-----+
|       |
| Use the command |
| $ gsh help      |
| to get the list of "gsh" commands. |
|       |
+-----+

[mission 3] $ cd
[mission 3] $ cd Castle/Main_building/Throne_room
[mission 3] $ gsh check

Congratulations, mission 3 has been successfully completed!

Well done!!!

From now on, the current location will be shown just
before the command prompt.

```

In questo livello invece dovevamo utilizzare il comando `rm` per rimuovere dei file chiamati “spider”, dato che i file erano molti con accanto vari numeri, ho utilizzato per cancellarli tutti:

```
~/Castle/Cellar  
[mission 8] $ rm *_spider_*
```

```
kali@kali: ~  
File Actions Edit View Help  
~/Castle/Cellar  
[mission 8] $ rm /Cellar/*spider*  
realpath: /Cellar/*spider*: cannot access final dirname /Cellar  
safe_rm: cannot remove '/Cellar/*spider*': it is not part of GameShell  
  
~/Castle/Cellar  
[mission 8] $ ^C  
  
~/Castle/Cellar  
[mission 8] $ rm /Cellar/10809_spider_9*  
realpath: /Cellar/10809_spider_9*: cannot access final dirname /Cellar  
safe_rm: cannot remove '/Cellar/10809_spider_9*': it is not part of GameShell  
  
~/Castle/Cellar  
[mission 8] $ rm /path/Cellar/10809_spider_9*  
realpath: /path/Cellar/10809_spider_9*: cannot access final dirname /path/Cellar  
safe_rm: cannot remove '/path/Cellar/10809_spider_9*': it is not part of GameShell  
  
~/Castle/Cellar  
[mission 8] $ rm /Cellar/10809_spider_9?  
realpath: /Cellar/10809_spider_9?: cannot access final dirname /Cellar  
safe_rm: cannot remove '/Cellar/10809_spider_9?': it is not part of GameShell  
  
~/Castle/Cellar  
[mission 8] $ rm 10809_spider_9?  
rm: cannot remove '10809_spider_9?': No such file or directory  
  
~/Castle/Cellar  
[mission 8] $ rm *_spider_*  
  
~/Castle/Cellar  
[mission 8] $ ls  
10157_bat_4 23080_bat_2 24422_bat_5 32423_bat_3 5677_bat_1 barrel_of_apples  
  
~/Castle/Cellar  
[mission 8] $ gsh check  
  
Congratulations, mission 8 has been successfully completed!
```

```
kali@kali: ~  
File Actions Edit View Help  
| Remark |  
| |  
| The wildcards "*" and "?" don't see hidden files, you need |  
| to add an explicit dot at the start of the pattern. |  
| |  
| |  
~/Castle/Cellar  
[mission 9] $ pwd  
/home/kali/gameshell/World/Castle/Cellar  
  
~/Castle/Cellar  
[mission 9] $ ls -A  
10157_bat_4 .17357_spider_2 .24071_spider_40 .29855_bat_3 .6160_spider_19  
.11991_spider_30 .18023_spider_38 .24255_bat_2 .29928_spider_13 .6515_spider_44  
.1267_spider_42 .18284_bat_5 .24422_bat_5 .31195_spider_50 .671_spider_45  
.12768_spider_47 .18568_spider_15 .25057_spider_17 .314_spider_32 .6802_spider_20  
.12832_spider_1 .19875_spider_27 .26010_spider_39 .31872_spider_46 .8189_spider_25  
.1324_spider_12 .20294_spider_11 .26498_spider_33 .32423_bat_3 .8729_spider_23  
.1345_spider_7 .21257_spider_22 .27132_spider_29 .36_spider_6 .8895_spider_8  
.13796_bat_1 .21335_bat_4 .27476_spider_49 .3987_spider_37 .9914_spider_28  
.13864_spider_41 .21468_spider_34 .27564_spider_48 .4440_spider_16 barrel_of_apples  
.14589_spider_24 .22211_spider_18 .28375_spider_31 .488_spider_5  
.14606_spider_14 .22369_spider_36 .28789_spider_21 .5085_spider_9  
.15927_spider_4 .22821_spider_3 .29224_spider_10 5677_bat_1  
.16092_spider_35 23080_bat_2 .29338_spider_26 .6020_spider_43  
  
~/Castle/Cellar  
[mission 9] $ rm *_spider_*  
  
~/Castle/Cellar  
[mission 9] $ ls -A  
10157_bat_4 .18284_bat_5 23080_bat_2 24422_bat_5 32423_bat_3 barrel_of_apples  
.13796_bat_1 .21335_bat_4 .24255_bat_2 .29855_bat_3 5677_bat_1  
  
~/Castle/Cellar  
[mission 9] $ gsh check  
  
Congratulations, mission 9 has been successfully completed!
```

In questo esercizio dovevamo spostare/copiare i coin nella nostra Chest che si trovava nella directory /Forest/Hut/Chest:

```
kali@kali: ~  
File Actions Edit View Help  
[mission 10] $ pwd  
/home/kali/gameshell/World/Castle/Cellar  
~/Castle/Cellar  
[mission 10] $ cd -  
/home/kali/gameshell/World/Castle  
~/Castle  
[mission 10] $ pwd  
/home/kali/gameshell/World/Castle  
~/Castle  
[mission 10] $ ls  
Cellar/ Great_hall/ Main_building/ Main_tower/ Observatory/  
~/Castle  
[mission 10] $ cd Great_hall  
~/Castle/Great_hall  
[mission 10] $ ls  
11801_decorative_shield 44999_stag_head standard_2 standard_4  
28706_suit_of_armour standard_1 standard_3  
~/Castle/Great_hall  
[mission 10] $ cp standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest  
~/Castle/Great_hall  
[mission 10] $ cd  
~  
[mission 10] $ pwd  
/home/kali/gameshell/World  
~  
[mission 10] $ ls  
Castle/ Forest/ Garden/ Mountain/ Stall/  
~  
[mission 10] $ cd Forest/Hut/Chest  
~/Forest/Hut/Chest  
[mission 10] $ ls  
coin_1 coin_2 coin_3 standard_1 standard_2 standard_3 standard_4  
~/Forest/Hut/Chest  
[mission 10] $ gsh check  
Congratulations, mission 10 has been successfully completed!
```

```
kali@kali: ~  
File Actions Edit View Help  
~/_____  
~/Forest/Hut/Chest  
[mission 11] $ cd  
~  
[mission 11] $ pwd  
/home/kali/gameshell/World  
~  
[mission 11] $ cd Castle/Great_hall  
~/Castle/Great_hall  
[mission 11] $ ls  
2205_tapestry_07 32363_tapestry_05 50117_tapestry_08 standard_3  
23861_tapestry_03 33949_stag_head 56381_decorative_shield standard_4  
24155_tapestry_06 36635_tapestry_10 565_suit_of_armour  
26530_tapestry_04 39262_tapestry_01 standard_1  
31669_tapestry_02 48383_tapestry_09 standard_2  
~/Castle/Great_hall  
[mission 11] $ cp *_tapestry* ~/Forest/Hut/Chest  
~/Castle/Great_hall  
[mission 11] $ cd  
~  
[mission 11] $ cd Forest  
~/Forest  
[mission 11] $ cd Hut/Chest  
~/Forest/Hut/Chest  
[mission 11] $ ls  
2205_tapestry_07 31669_tapestry_02 48383_tapestry_09 coin_3 standard_4  
23861_tapestry_03 32363_tapestry_05 50117_tapestry_08 standard_1  
24155_tapestry_06 36635_tapestry_10 coin_1 standard_2  
26530_tapestry_04 39262_tapestry_01 coin_2 standard_3  
~/Forest/Hut/Chest  
[mission 11] $ gsh check  
Congratulations, mission 11 has been successfully completed!
```

Con **alias** abbiamo creato una scorciatoia per delle sequenze di comandi:

```
kali@kali: ~  
File Actions Edit View Help  
la  
for the command  
ls -A  
and check that it works as expected.  
How fortunate, there is a nice rock hidden just where you  
are.  
Useful commands  
alias STRING='COMMAND'  
Create a synonym for a string, that will stand for a  
command.  
~/Forest/Hut/Chest  
[mission 14] $ pwd  
/home/kali/gameshell/World/Forest/Hut/Chest  
~/Forest/Hut/Chest  
[mission 14] $ la  
la: command not found  
~/Forest/Hut/Chest  
[mission 14] $ alias la="ls -A"  
~/Forest/Hut/Chest  
[mission 14] $ la  
.14209_coin_1      31669_tapestry_02  48383_tapestry_09  coin_3             standard_3  
2205_tapestry_07  32363_tapestry_05  50117_tapestry_08  .nice_rock         standard_4  
23861_tapestry_03  36635_tapestry_10  .902_coin_3       painting_NJChRijl  
24155_tapestry_06  39262_tapestry_01  coin_1            standard_1  
26530_tapestry_04  .41625_coin_2     coin_2            standard_2  
~/Forest/Hut/Chest  
[mission 14] $ gsh check  
Congratulations, mission 14 has been successfully completed!
```

```
kali@kali: ~  
File Actions Edit View Help  
  
|| Details ||  
||-----||  
|| ``nano`` is a command-line text editor. You can use it ||  
|| whenever you need to edit a file from the shell. ||  
||  
|| Useful commands ||  
||-----||  
|| nano FILE ||  
|| Edit the file from the shell. ||  
|| (If the file does not exist, it will be created.) ||  
||  
|| Keybindings are listed at the bottom of the screen (the "^" ||  
|| symbol means "Control"). The most important ones are: ||  
|| Control-x quit ||  
|| Control-o save ||  
|| Control-w search for a string ||  
||  
|| Remark: do not use Control-s or Control-z! || | | | |
||-----||  
|| /6\ \_ ||-----|| \_ \6\ ||  
|| ( ||-----|| ) ||  
|| \_ \_ ||-----|| \_ \_ ||  
  
~/Forest/Hut/Chest  
[mission 15] $ pwd  
/home/kali/gameshell/World/Forest/Hut/Chest  
  
~/Forest/Hut/Chest  
[mission 15] $ nano journal.txt  
  
~/Forest/Hut/Chest  
[mission 15] $ gsh check  
  
Congratulations, mission 15 has been successfully completed!
```



```

kali@kali: ~
File Actions Edit View Help

Remark

The description of the ``find`` command is deliberately
kept short. You will find more information in the manual.
(You can for example search for the string "-name" in the
manual.)

~/Garden/Maze
[mission 21] $ find . -iname "gold_coin_*"
./9b92bd7fd61/fece447979508c/6988e163c6d7c343ade4cfd331/Gold_Coin_2
./580b29ba27ca923ed/78a3e15188bda78bb2b3ff4adf/4217a43721878567c1b6a593/gold_coin_1

~/Garden/Maze
[mission 21] $ cd 9b92bd7fd61/fece447979508c/6988e163c6d7c343ade4cfd331/

~/Garden/Maze/9b92bd7fd61/fece447979508c/6988e163c6d7c343ade4cfd331
[mission 21] $ mv Gold_Coin_2 ~/Forest/Hut/Chest

~/Garden/Maze/9b92bd7fd61/fece447979508c/6988e163c6d7c343ade4cfd331
[mission 21] $ cd ..

~/Garden/Maze/9b92bd7fd61/fece447979508c
[mission 21] $ cd ..

~/Garden/Maze/9b92bd7fd61
[mission 21] $ cd .. you become, the more you are abl

~/Garden/Maze
[mission 21] $ cd 580b29ba27ca923ed/78a3e15188bda78bb2b3ff4adf/4217a43721878567c1b6a593/

~/Garden/Maze/580b29ba27ca923ed/78a3e15188bda78bb2b3ff4adf/4217a43721878567c1b6a593
[mission 21] $ mv gold_coin_1 ~/Forest/Hut/Chest

~/Garden/Maze/580b29ba27ca923ed/78a3e15188bda78bb2b3ff4adf/4217a43721878567c1b6a593
[mission 21] $ gsh check

Congratulations, mission 21 has been successfully completed!

```

```

kali@kali: ~
File Actions Edit View Help
) cat FILE
( Display the contents of the file.
)
( head FILE
( Print the first 10 lines of the file.
)
( head -n K FILE
( Print the first K lines of the file.
)
( Remark
(
( A "FILE" may contain directories if the file in question is
( not in the current directory.
(
( .....
(0)=>>=====<=<=(0)
(=====)
V

~/Mountain/Cave/Book_of_potions
[mission 22] $ ls
page_01 page_03 page_05 page_07 page_09 page_11 page_13
page_02 page_04 page_06 page_08 page_10 page_12 table_of_contents

~/Mountain/Cave/Book_of_potions
[mission 22] $ cd -
/home/kali/gameshell/World/Mountain/Cave

~/Mountain/Cave
[mission 22] $ ls
Book_of_potions/ servillus

~/Mountain/Cave
[mission 22] $ head -n 6 Book_of_potions/page_07
Herbal tea

1) Boil water.
2) Add herbs from the forest.
3) Let it sit for five minutes and drink while hot.

~/Mountain/Cave
[mission 22] $ gsh check

Congratulations, mission 22 has been successfully completed!

```


Con l'utilizzo di cat visualizziamo il contenuto delle page_01 e altre, richieste dal livello:

```
kali@kali: ~  
File Actions Edit View Help  
-----  
~/Mountain/Cave/Book_of_potions  
[mission 23] $ cat page_12  
Toadstool stew  
  
1) Boil water in a cauldron.  
2) Add in a few death caps (Amanita phalloides).  
3) Also add a few fly agarics (Amanita muscaria).  
4) And some destroying angels (Amanita virosa).  
5) Mix in a few deadly webcaps (Cortinarius rubellus).  
6) Feel free to add in any colourful fungi you have on hand.  
7) Let half of the water evaporate.  
8) Season with a pinch of salt and a few herbs.  
9) Serve hot in a bowl.  
  
~/Mountain/Cave/Book_of_potions  
[mission 23] $ cd -  
/home/kali/gameshell/World/Mountain/Cave  
  
~/Mountain/Cave  
[mission 23] $ ls  
Book_of_potions/ servillus  
  
~/Mountain/Cave  
[mission 23] $ tail -n 9 Book_of_potions/page_12  
1) Boil water in a cauldron.  
2) Add in a few death caps (Amanita phalloides).  
3) Also add a few fly agarics (Amanita muscaria).  
4) And some destroying angels (Amanita virosa).  
5) Mix in a few deadly webcaps (Cortinarius rubellus).  
6) Feel free to add in any colourful fungi you have on hand.  
7) Let half of the water evaporate.  
8) Season with a pinch of salt and a few herbs.  
9) Serve hot in a bowl.  
  
~/Mountain/Cave  
[mission 23] $ gsh check  
  
Congratulations, mission 23 has been successfully completed!
```

```
kali@kali: ~  
File Actions Edit View Help  
-----  
Useful commands  
  
cat FILE1 FILE2 ... FILEn  
Display the contents of the files in order.  
Remark: "cat" is an abbreviation for "concatenate".  
  
()=( @=()  
  
~/Mountain/Cave  
[mission 24] $ cat Book_of_potions/page_01 Book_of_potions/page_0  
page_01 page_02 page_03 page_04 page_05 page_06 page_07 page_08 page_09  
  
~/Mountain/Cave  
[mission 24] $ cat Book_of_potions/page_01 Book_of_potions/page_0  
page_01 page_02 page_03 page_04 page_05 page_06 page_07 page_08 page_09  
  
~/Mountain/Cave  
[mission 24] $ cat Book_of_potions/page_01 Book_of_potions/page_02  
Transformation potion  
  
1) Boil water in a cauldron.  
2) Add 3 measures of fluxweed to the cauldron.  
3) Add 2 bundles of knotgrass to the cauldron.  
4) Stir 4 times, clockwise.  
5) Wave your wand then let potion brew for 80 minutes.  
6) Add 4 leeches to the cauldron.  
7) Crush 2 scoops of lacewing flies to a fine paste.  
8) Add 2 measures of the crushed lacewings to the cauldron.  
9) Heat for 30 seconds on a low heat.  
10) Add 3 measures of boomslang skin to the cauldron.  
11) Crush a bicorn horn into a fine powder.  
12) Add 1 measure of the crushed horn to the cauldron.  
13) Heat for 20 seconds at a high temperature.  
14) Wave your wand then let potion brew for 24 hours.  
15) Add 1 additional scoop of lacewings to the cauldron.  
16) Stir 3 times, counter-clockwise.  
17) Split potion into multiple doses, if desired.  
18) Add a pieces of the person you wish to become.  
19) Wave your wand to complete the potion.  
  
~/Mountain/Cave  
[mission 24] $ gsh check  
  
Congratulations, mission 24 has been successfully completed!
```

Creiamo un alias chiamato journal, il contenuto dell'alias è una lunga sequenza di codice che ci porta ad aprire un file dentro delle directory:

```
Use the command
$ gsh help
to get the list of "gsh" commands.

~
[mission 16] $ pwd
/home/kali/gameshell/World

~
[mission 16] $ cd Castle/Cellar

~/Castle/Cellar
[mission 16] $ alias journal="nano ~/Forest/Hut/Chest/journal.txt"

~/Castle/Cellar
[mission 16] $ journal

~/Castle/Cellar
[mission 16] $ gsh check
Congratulations, mission 16 has been successfully completed!
```

Congratulations!

From now on you can use the file
"~/gshrc"
to record aliases. More information can be found in
the file (it has been created for you).

```
kali@kali: ~
File Actions Edit View Help

(
)
1/ Run the ``xeyes`` command, and stop it.
2/ Run the ``xeyes`` command in the background.

Useful commands

xeyes
Open a window with 2 eyes that track your mouse.

COMMAND &
Run the command in the background.

Control-c
This key binding usually interrupts the current command by
sending it the "INT" signal.

(0)=>.....<=(0)

~/Castle/Cellar/.Lair_of_the_spider_queen WLnLapRgiURcliBG quJoA0BajbeBNdTL
[mission 18] $ xeyes
^C

~/Castle/Cellar/.Lair_of_the_spider_queen WLnLapRgiURcliBG quJoA0BajbeBNdTL
[mission 18] $ xeyes &
[1] 80616

~/Castle/Cellar/.Lair_of_the_spider_queen WLnLapRgiURcliBG quJoA0BajbeBNdTL
[mission 18] $ gsh check

Congratulations, mission 18 has been successfully completed!
```

```
kali@kali: ~
File Actions Edit View Help

| Many of Unix commands process text: they receive text as input and
| produce text as output.
|
| It is common for those commands to write their output to their
| "standard output", which means that (by default) the output is written
| into the terminal.
|
| Most of those commands can receive input either through files (given
| as arguments) or from their "standard input". For example:
| - ``head FILE`` reads its input from the file,
| - ``head`` reads its input on the standard input.
|
| By default, data from the standard input is read from the keyboard,
| but a pipe can change that.
|
( )=(
,_____(@=)

~/Mountain/Cave/Book_of_potions
[mission 25] $ cd -
/home/kali/gameshell/World/Mountain/Cave

~/Mountain/Cave
[mission 25] $ tail -n 16 ~/Mountain/Cave/Book_of_potions/page_03 ~/Mountain/Cave/Book_of_potions/page_04 | grep '[0-9]*'
1) Fill a cauldron with used bath water.
2) Put a moderately large frog in the water.
3) Let the preparation rest overnight.
4) The next morning thank and free your little green friend.
5) Boil the water and add in a few sticks of oak tree.
6) Crush 5 river stones to a fine powder.
7) Mix in a third of the powder and stir vigorously.
8) Let the preparation rest for a day.
9) Add hairs from the tail of a squirrel (willingly given).
10) Add the remaining stone powder.
11) Stir the potion very vigorously, in all directions.
12) Take some time to rest after such an effort.
13) Rest a little bit more.
14) Even take a nap if you want.
15) Add a few larch tree needles for seasoning.
16) Drink the potion from the cauldron.

~/Mountain/Cave
[mission 25] $ gsh check

Congratulations, mission 25 has been successfully completed!
```

Utilizziamo il tail per visualizzare dalla fine il contenuto del file:

```
kali@kali: ~  
File Actions Edit View Help  
[mission 27] $ kill 181650  
~/Castle  
[mission 27] $ ps  
  PID TTY          TIME CMD  
  1840 pts/0    00:00:01 zsh  
  9640 pts/0    00:00:00 bash  
  9666 pts/0    00:00:01 bash  
 80616 pts/0    00:00:13 xeyes  
181650 pts/0    00:00:00 spell  
182453 pts/0    00:00:00 ps  
~/Castle  
[mission 27] $ ps  
  PID TTY          TIME CMD  
  1840 pts/0    00:00:01 zsh  
  9640 pts/0    00:00:00 bash  
  9666 pts/0    00:00:01 bash  
 80616 pts/0    00:00:13 xeyes  
181650 pts/0    00:00:00 spell  
182862 pts/0    00:00:00 ps  
~/Castle  
[mission 27] $ kill 181650  
~/Castle  
[mission 27] $ kill -9 181650  
~/Castle  
[mission 27] $ ps  
  PID TTY          TIME CMD  
  1840 pts/0    00:00:01 zsh  
  9640 pts/0    00:00:00 bash  
  9666 pts/0    00:00:01 bash  
 80616 pts/0    00:00:13 xeyes  
183143 pts/0    00:00:00 ps  
~/Castle  
[mission 27] $ gsh check  
Congratulations, mission 27 has been successfully completed!
```


In questo livello dovevamo killare un processo chiamato “spell”, prima con kill -s TERM PID, poi forzatamente con kill -s KILL PID:

```
~
[mission 28] $

      *#@*
      @_**/~
      !$-#

      *#@*
      @_**/~
      !$-#

kill -

      *#@*
      @_**/~
      !$-#

      *#@*
      @_**/~
      !$-#

s KILL 2

      *#@*
      @_**/~
      !$-#

09976

      *#@*
      @_**/~
      !$-#

21 the quieter you become, the more you are

      *#@*
      @_**/~
      !$-#

0809

~
[mission 28] $ gsh check

Congratulations, mission 28 has been successfully completed!
```

```
kali@kali: ~
File Actions Edit View Help

--+-----+--
| Use the command |
| $ gsh help      |
| to get the list of "gsh" commands. |
--+-----+--

~
[mission 30] $ gsh goal

Mission goal

To get better in the magical art, one needs to know mental math.

Get ready, because Merlin is about to test your precision with sums.

Run the command ``gsh check`` to start.

~
[mission 30] $ gsh check
93 + 67 = ?? 160
16 + 1 = ?? 17
1 + 59 = ?? 60
96 + 77 = ?? 173
13 + 80 = ?? 93

Congratulations, mission 30 has been successfully completed!
```

Ho raccolto le informazioni nella libreria, nel file Mathematics_101, avviando con:
gsh check < Mathematics_101 e compila in automatico:

```
~/Castle/Main_building/Library  
[mission 31] $ gc 8624  
1608      cat Mathematics_101  
          gsh check < Mathematics_101  
98 * 88 = ?? 24 * 67 = ?? 88 * 5 = ?? 69 * 49 = ?? 97 * 52 = ?? 54 * 52 = ?? 44 * 38 = ?? 54 * 73 =  
?? 89 * 61 = ?? 1 * 66 = ?? 32 * 66 = ?? 61 * 43 = ?? 94 * 49 = ?? 54 * 60 = ?? 82 * 96 = ?? 42 * 50  
= ?? 23 * 75 = ?? 6 * 8 = ?? 89 * 80 = ?? 15 * 73 = ?? 28 * 82 = ?? 5 * 5 = ?? 37 * 75 = ?? 14 * 91  
= ?? 66 * 57 = ?? 51 * 88 = ?? 98 * 54 = ?? 64 * 93 = ?? 86 * 58 = ?? 37 * 8 = ?? 44 * 14 = ?? 15 *  
43 = ?? 31 * 92 = ?? 81 * 24 = ?? 30 * 21 = ?? 37 * 17 = ?? 34 * 48 = ?? 74 * 17 = ?? 78 * 65 = ??  
75 * 60 = ?? 82 * 66 = ?? 63 * 56 = ?? 35 * 51 = ?? 74 * 53 = ?? 70 * 78 = ?? 88 * 69 = ?? 25 * 95 =  
?? 68 * 40 = ?? 27 * 16 = ?? 29 * 48 = ?? 94 * 6 = ?? 30 * 7 = ?? 83 * 8 = ?? 81 * 48 = ?? 74 * 55  
= ?? 49 * 94 = ?? 64 * 90 = ?? 17 * 77 = ?? 51 * 59 = ?? 94 * 30 = ?? 82 * 38 = ?? 29 * 55 = ?? 57 *  
35 = ?? 67 * 59 = ?? 22 * 59 = ?? 71 * 78 = ?? 82 * 23 = ?? 90 * 52 = ?? 16 * 44 = ?? 94 * 27 = ??  
34 * 65 = ?? 56 * 71 = ?? 2 * 75 = ?? 70 * 62 = ?? 9 * 5 = ?? 63 * 6 = ?? 42 * 77 = ?? 66 * 36 = ??  
30 * 37 = ?? 65 * 79 = ?? 99 * 52 = ?? 73 * 64 = ?? 40 * 15 = ?? 33 * 70 = ?? 30 * 62 = ?? 93 * 48 =  
?? 62 * 79 = ?? 25 * 68 = ?? 36 * 88 = ?? 10 * 95 = ?? 66 * 17 = ?? 18 * 57 = ?? 90 * 55 = ?? 98 *  
60 = ?? 39 * 56 = ?? 66 * 11 = ?? 40 * 65 = ?? 23 * 60 = ?? 67 * 42 = ?? 56 * 73 = ??  
Congratulations, mission 31 has been successfully completed!
```

```
kali@kali: ~  
File Actions Edit View Help  
grimoire_10062 grimoire_13479 grimoire_18538 grimoire_24953 grimoire_29930 grimoire_5442  
grimoire_10565 grimoire_13723 grimoire_19003 grimoire_25459 grimoire_30298 grimoire_5444  
grimoire_11035 grimoire_14082 grimoire_19006 grimoire_25608 grimoire_3032 grimoire_6219  
grimoire_11140 grimoire_14629 grimoire_19088 grimoire_2591 grimoire_30444 grimoire_6239  
grimoire_11361 grimoire_14954 grimoire_19202 grimoire_26072 grimoire_30933 grimoire_7135  
grimoire_11421 grimoire_15153 grimoire_19517 grimoire_26414 grimoire_31112 grimoire_7192  
grimoire_11485 grimoire_15362 grimoire_19885 grimoire_26905 grimoire_31532 grimoire_7308  
grimoire_115 grimoire_15644 grimoire_20049 grimoire_27160 grimoire_31780 grimoire_7554  
grimoire_11738 grimoire_1574 grimoire_20076 grimoire_27586 grimoire_32509 grimoire_7575  
grimoire_11844 grimoire_1649 grimoire_20595 grimoire_28169 grimoire_3553 grimoire_8022  
grimoire_11890 grimoire_16625 grimoire_23655 grimoire_28229 grimoire_4237 grimoire_9614  
grimoire_1201 grimoire_17103 grimoire_23698 grimoire_28283 grimoire_4477 grimoire_9806  
grimoire_12375 grimoire_17147 grimoire_23726 grimoire_28851 grimoire_477 grimoire_9894  
grimoire_12611 grimoire_1752 grimoire_23888 grimoire_28862 grimoire_4937 grimoire_9976  
  
~/Castle/Main_building/Library  
[mission 32] $ cd Merlin_s_office/  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ ls Merlin_s_office/grimoire_* > /Drawer/inventory.txt  
bash: /Drawer/inventory.txt: No such file or directory  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ ls grimoire_* > /Drawer/inventory.txt  
bash: /Drawer/inventory.txt: No such file or directory  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ ls grimoire_* > Drawer/inventory.txt  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ gc  
^C  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ gsh check  
  
Congratulations, mission 32 has been successfully completed!
```



```
~/Castle/Main_building/Library/Merlin_s_office  
[mission 33] $ grep -l -i gsh grimoire_* 2>/dev/null  
grimoire_athtkvhjmqmAZjeDVayZobldzFnI  
grimoire_BHnkmLrkLtyOrCrv  
grimoire_cFddZWCxS  
grimoire_EFszenfKnRIpOjtPs  
grimoire_eKojTxwaKsfLuChnhV  
grimoire_EuiXHVJKvUOpnjaR  
grimoire_fKmDUYnFtuGmNgSYcXDrleUuO  
grimoire_giHSdKfLVUbxDM  
grimoire_IKnlfFymVpFSb  
grimoire_JLDyJToeEtrIE  
grimoire_jTWvcBLVoxgWu  
grimoire_kgUVYbFdkBmkjScrDKAbq  
grimoire_kOehXBEZGnLiejU  
grimoire_kPepriyZEzwqUHHKtSxdGxUMZPdGMYh  
grimoire_MAAzSShxdITvueMvnrLLncwRUE  
grimoire_MacZkKZAXDffjhtKaQUhjNLRZQMrNZr  
grimoire_PmohLkaXMrytDsowfHzTYMXEHJE  
grimoire_tlxIsheus  
grimoire_vdCOBulxVKVWZHsXKcksvkGjo  
grimoire_veCurRwSfYeEtcBczSvZRzRc  
grimoire_VMUARBOYsmKUQrgabNvwFFKHVEU  
grimoire_voxudCRnKtYw  
grimoire_xQRipRzUrovYMhsMmR  
grimoire_xqWDvsCnUvEwjKU  
grimoire_xQXkRsuEotSW  
grimoire_yYCztTEnieZpizYisp
```

```
~/Castle/Main_building/Library/Merlin_s_office  
[mission 33] $ gsh check
```

Congratulations, mission 33 has been successfully completed!