

Compito di fine mese N.2 Christian Brenci

Gioco per comprendere i comandi della Shell.

In questo progetto ci è stato richiesto di scaricare e avviare un gioco da terminale sulla nostra VM di Kali linux. Una volta avviato ci verranno presentate delle quest da completare tramite l'utilizzo dei comandi della shell, solo dopo aver completato o aver soddisfatto le condizioni della quest stessa, possiamo fare un check finale. Se tutti i passaggi sono stati corretti si può accedere al nuovo livello.

Nel corso del gioco e in questo report vedremo i comandi che il gioco imposta per vedere le richieste della missione, resettare quest'ultima che sono rispettivamente “gsh goal” e “gsh reset” questi non sono affini al nostro scopo ma li useremo davvero molte volte.

Per pulizia, comprensione e fluidità del Report descriverò ogni comando solo la prima volta che lo incontreremo salvo quelle volte dove la spiegazione è necessaria per comprendere il fine della missione.

Missione n.1

```
[mission 1] $ pwd  
/home/kali/gameshell/World  
[mission 1] $ ls  
Castle Forest Garden Mountain Stall  
[mission 1] $ cd Castle  
[mission 1] $ ls  
Cellar Great_hall Main_building Main_tower Observatory  
[mission 1] $ cd Main_tower  
[mission 1] $ ls  
First_floor  
[mission 1] $ cd First_floor  
[mission 1] $ ls  
Second_floor  
[mission 1] $ cd Second_floor  
[mission 1] $ ls  
Top_of_the_tower  
[mission 1] $ cd Top_of_the_tower  
[mission 1] $ gsh check  
  
Congratulations, mission 1 has been successfully completed!
```

pwd= ci mostra il percorso assoluto dove ci troviamo; in questo caso: (vedi sotto pwd)
/home/kali/gameshell/World

ls= mostra il contenuto della directory (cartella) in questo caso nella directory “World” erano contenute le directory “Castle, Forest, Garden ecc...

cd= ci permette di muoverci/spostarci di directory, come vediamo in figura il comando “ cd Castle” ci porta dentro la directory castle.

```
|  
|-----+  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands.  
|-----+  
|  
[mission 2] $ █
```

Mission n.2

```
[mission 2] $ pwd  
/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 Castle  
bash: cd: Castle: No such file or directory  
[mission 2] $ cd /home/kali/gameshell/World/Castle  
[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] $ gsh check
```

Congratulations, mission 2 has been successfully completed!

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

```
[mission 3] $ █
```

cd ..= ci permette di tornare indietro della directory precedente, in questo caso “Second_floor”

Mission n.3

```
[mission 3] $ pwd  
/home/kali/gameshell/World  
[mission 3] $ cd Castle  
[mission 3] $ ls  
Cellar Great_hall Main_building Main_tower Observatory  
[mission 3] $ cd Great_hall/  
[mission 3] $ pwd  
/home/kali/gameshell/World/Castle/Great_hall  
[mission 3] $ ls  
[mission 3] $ ls  
[mission 3] $ cd -  
/home/kali/gameshell/World/Castle  
[mission 3] $ cd Main_building/  
[mission 3] $ ls  
Library Throne_room  
[mission 3] $ cd  
[mission 3] $ cd Castle/Main_building/Throne_room  
[mission 3] $ gsh check
```

Congratulations, mission 3 has been successfully completed!

cd percorso assoluto= per arrivare ad una directory che si trova in un percorso diverso da quello dove ci troviamo, possiamo stampare il percorso assoluto di dove si trova quella directory e ci porterà dentro la directory che abbiamo specificato.
cd da solo= ti porta alla directory “~”

Missione n.4

```
~/Castle/Main_building/Throne_room
[mission 4] $ cd

~
[mission 4] $ cd Forest/

~/Forest
[mission 4] $ mkdir Hut

~/Forest
[mission 4] $ cd Hut/

~/Forest/Hut
[mission 4] $ mkdir Chest

~/Forest/Hut
[mission 4] $ gsh check

Congratulations, mission 4 has been successfully completed!
```

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

```
~/Forest/Hut
[mission 5] $ 
```

mkdir=crea una cartella

Missione n.5

```
~/Forest/Hut
[mission 5] $ cd

~
[mission 5] $ cd Castle/Cellar/

~/Castle/Cellar
[mission 5] $ ls
barrel_of_apples bat_1 bat_2 spider_1 spider_2 spider_3

~/Castle/Cellar
[mission 5] $ rm spider_1 && spider_2 && spider_3
spider_2: command not found

~/Castle/Cellar
[mission 5] $ ls
barrel_of_apples bat_1 bat_2 spider_2 spider_3

~/Castle/Cellar
[mission 5] $ rm spider_2 && rm spider_3

~/Castle/Cellar
[mission 5] $ gsh check

Congratulations, mission 5 has been successfully completed!
```

rm=è un comando per eliminare file, il costrutto “&&” significa “and” e serve per collegare due azioni. Altrimenti si poteva specificare “kill -r *spider” per eliminare tutti i file contenuti la parola “spider”.

```
~/Castle/Cellar
[mission 6] $ cd -
/home/kali/gameshell/World

~
[mission 6] $ ls
Castle Forest Garden Mountain Stall

~
[mission 6] $ cd Garden

~/Garden
[mission 6] $ ls
coin_1 coin_2 coin_3 Flower_garden Maze Shed

~/Garden
[mission 6] $ mv coin_1 coin_2 coin_3 ~/World/Forest/Hut/Chest
mv: target '/home/kali/gameshell/World/World/Forest/Hut/Chest': No such file or directory

~/Garden
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Forest/Hut/Chest

~/Garden
[mission 6] $ gsh check

Congratulations, mission 6 has been successfully completed!
```

Missione n.6

mv= serve per spostare dei file in una directory diversa usando il percorso assoluto di dove la si vuole spostare.

Missione n.7

```
~/Garden
[mission 7] $ ls -a
. .. .30292_coin_2 .59104_coin_3 .64984_coin_1 Flower_garden Maze Shed

~/Garden
[mission 7] $ mv .30292_coin_2 .59104_coin_3 .64984_coin_1 ~/Forest/Hut/Chest

~/Garden
[mission 7] $ gsh check

Congratulations, mission 7 has been successfully completed!
```

ls -a=serve per vedere file e directory nascoste dentro una directory.

Missione n.8

```
~/Castle/Cellar
[mission 8] $ ls -a
.           10715_spider_39  12491_spider_22  12818_spider_3   14223_spider_8   17689_spider_34
..          1107_spider_36   1252_spider_21   13024_spider_4   14376_spider_29   17754_spider_1
10658_spider_14  11337_spider_6   12588_spider_32  13581_spider_38  16373_spider_23  17854_spider_26

~/Castle/Cellar
[mission 8] $ rm *-spider
rm: cannot remove '*-spider': No such file or directory

~/Castle/Cellar
[mission 8] $ ls
10658_spider_14  11337_spider_6   12588_spider_32  13581_spider_38  16373_spider_23  17854_spider_26
10715_spider_39  12491_spider_22  12818_spider_3   14223_spider_8   17689_spider_34  18642_bat_4
1107_spider_36   1252_spider_21   13024_spider_4   14376_spider_29   17754_spider_1   1868_spider_41

~/Castle/Cellar
[mission 8] $ rm *_spider_
rm: cannot remove ' *_spider_ ': No such file or directory

~/Castle/Cellar
[mission 8] $ rm *_spider_*
rm: cannot remove ' *_spider_* ': No such file or directory

~/Castle/Cellar
[mission 8] $ ls
18642_bat_4  27506_bat_2  31625_bat_5  7301_bat_1  95_bat_3

~/Castle/Cellar
[mission 8] $ gsh check

Congratulations, mission 8 has been successfully completed!
```

rm *nome*=come spiegato prima eliminerà tutti file o directory contenenti le parole racchiuse tra gli asterischi.

Missione n.9

```
~/Castle/Cellar
[mission 9] $ ls -a
.
.. .13215_spider_27 .14871_spider_34 .17748_bat_1 .18691_spider_24 .20540_spider_36 .22741_spider_30 .25152_bat
..
.. .13257_spider_47 .16884_spider_19 .18441_spider_28 .19543_spider_22 .2132_spider_10 .23071_spider_49 .25606_spi
.10409_spider_8 .14212_spider_39 .16920_spider_38 .18621_spider_3 .20083_spider_48 .2222_spider_15 .23859_bat_4 .25628_spi
.12512_spider_46 .14558_spider_35 .17044_spider_6 18642_bat_4 .2011_spider_33 .22391_spider_16 .25151_spider_11 .257_spide

~/Castle/Cellar
[mission 9] $ rm .*_spider_
rm: cannot remove '.*_spider_': No such file or directory

~/Castle/Cellar
[mission 9] $ rm .*_spider_*
rm: cannot remove '.*_spider_*': No such file or directory

~/Castle/Cellar
[mission 9] $ ls -a
.
.. .17748_bat_1 18642_bat_4 .23859_bat_4 .25152_bat_2 27506_bat_2 .28413_bat_5 31625_bat_5 .5936_bat_3 7301_bat_1 95_bat_3

~/Castle/Cellar
[mission 9] $ gsh check

Congratulations, mission 9 has been successfully completed!
```

rm .= cancella i file o cartelle nascoste, combinato a “*spider*” eliminerà tutti i file contenenti la parola “spider”.

Missione n.10

```
~/Castle/Cellar
[mission 10] $ cd ~/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
2455_suit_of_armour 39826_decorative_shield 46557_stag_head standard_1 standard_2 standard_3 standard_4

~/Castle/Great_hall
[mission 10] $ cp *standard ~/Forest/Hut/Chest
cp: cannot stat '*standard': No such file or directory

~/Castle/Great_hall
[mission 10] $ cp standard_* ~/Forest/Hut/Chest

~/Castle/Great_hall
[mission 10] $ gsh check

Congratulations, mission 10 has been successfully completed!
```

cp= è un comando che serve per copiare un file. In questo caso abbiamo copiato tutte le cartelle contenenti il nome “standard_” nella cartella “chest” usando il percorso assoluto.

Missione n.11

```
~ [mission 11] $ pwd  
/home/kali/gameshell/World  
  
~ [mission 11] $ cd ~/Castle/Great_hall/  
  
~/Castle/Great_hall  
[mission 11] $ ls  
15954_tapestry_09  1743_suit_of_armour  20617_tapestry_05  26678_tapestry_02  45544_tapestry_08  
  
~/Castle/Great_hall  
[mission 11] $ ls -a  
./  ..  15954_tapestry_09  1743_suit_of_armour  20617_tapestry_05  26678_tapestry_02  45544_tap  
  
~/Castle/Great_hall  
[mission 11] $ cp *_tapestry_* ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 11] $ gsh check  
  
Congratulations, mission 11 has been successfully completed!
```

Missione n.12

```
~/Castle/Main_tower/First_floor  
[mission 12] $ cp painting_nnxGtKyz ~/Forest/Hut/Chest  
  
~/Castle/Main_tower/First_floor  
[mission 12] $ gsh check  
  
Congratulations, mission 12 has been successfully completed!
```

In queste missioni abbiamo solo trovato, lezionato e copiato dei file usando i comandi sopracitati.

Mission n. 13

```
~/Castle/Main_tower/First_floor  
[mission 13] $ cal 2026
```

2026

January

Su	Mo	Tu	We	Th	Fr	Sa
						1
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February

Su	Mo	Tu	We	Th	Fr	Sa
						1
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
						29
						30
						31

March

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
						29
						30
						31

April

May

June

Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1							1
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30		24	25	26	27	28	29	30	
						31							

July

August

September

Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
						31							

October

November

December

Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1							1
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31	29	30					27
													28
													29
													30
													31

cal= stampa un calendario dell'anno o dei parametri da noi indicati al comando. La missione di chiedeva di individuare il giorno della settimana tramite una data dataci casualmente.

```
~/Castle/Main_tower/First_floor  
[mission 13] $ gsh check
```

What was the day of the week for the 05-24-2026?

- 1 : Monday
- 2 : Tuesday
- 3 : Wednesday
- 4 : Thursday
- 5 : Friday
- 6 : Saturday
- 7 : Sunday

Your answer: 7

Congratulations, mission 13 has been successfully completed!

Missione n.14

```
~/Castle/Main_tower/First_floor  
[mission 14] $ la  
. ./ .nice_rock painting_JuRhBnNC painting_nnxGtKyz painting_RaWaUjsl Second_floor/  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ alias la='ls -A'  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ la  
.nice_rock painting_JuRhBnNC painting_nnxGtKyz painting_RaWaUjsl Second_floor/  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ gsh check  
  
Congratulations, mission 14 has been successfully completed!
```

alias= Il comando “alias” serve a creare una shortcut per un comando. Noi gli diamo il nuovo comando da digitare in questo caso “la” e lui riproduce il comando “ls -a” e lo salva. Questi shortcut molto spesso sono temporanei, una volta chiuso il terminale si auto-eliminano, ma esistono dei modi per renderli permanenti.

Missione n.15

```
~/Castle/Main_tower/First_floor  
[mission 15] $ cd ~/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!
```

nano=serve per “aprire” un file e poterlo modificare.

Missione n.16

```
~/Forest/Hut/Chest  
[mission 16] $ alias journal='nano ~/Forest/Hut/Chest/journal.txt'  
  
~/Forest/Hut/Chest  
[mission 16] $ journal  
  
~/Forest/Hut/Chest  
[mission 16] $ gsh check  
  
Congratulations, mission 16 has been successfully completed!
```

qui si è operato come nella missione 14, ma in questo caso gli stiamo dicendo di creare un alias per poter modificare un file, quindi abbiamo specificato con un percorso assoluto dove si trovasse quel file in modo tale da poterlo aprire ovunque ci trovassimo nelle directory del gioco.

Missione n.17

```
~/Castle/Cellar  
[mission 17] $ cd .\Lair_of_the_spider_queen\ nhawOdHECpOLsnfs QKmgLOHwhNdXGfnP/  
  
~/Castle/Cellar/.Lair_of_the_spider_queen nhawOdHECpOLsnfs QKmgLOHwhNdXGfnP  
[mission 17] $ ls  
CXoPJVmYhoYOAeQc_baby_bat_fVHckDSINmmFXHfo YevvtZdaNUnhmiwj_spider_queen_NiKcnBiCbtcUVxsO  
  
~/Castle/Cellar/.Lair_of_the_spider_queen nhawOdHECpOLsnfs QKmgLOHwhNdXGfnP  
[mission 17] $ rm YevvtZdaNUnhmiwj_spider_queen_NiKcnBiCbtcUVxsO  
  
~/Castle/Cellar/.Lair_of_the_spider_queen nhawOdHECpOLsnfs QKmgLOHwhNdXGfnP  
[mission 17] $ gsh check  
Perfect, it took you only 18 seconds to complete this mission!  
  
Congratulations, mission 17 has been successfully completed!
```

comandi visti in precedenza

missione n.18

```
~/Castle  
[mission 18] $ xeyes  
^C  
  
~/Castle  
[mission 18] $ xeyes &  
[1] 21174  
  
~/Castle  
[mission 18] $ gsh check  
  
Congratulations, mission 18 has been successfully completed!
```

xeyes=Stampa degli occhi grafici, che seguono il movimento del mouse. Sembra più un comando divertente, che di qualsiasi uso utile, si puo' anche lanchiare in background.

Missione n.19

tree= stampa un “albero genealogico” o semplicemente una struttura grafica esemplificata delle directory e dei loro contenuti, molto utile per individuare la posizione delle varie cartelle.

```
~/Garden/Maze  
[mission 19] $ tree  
|   53e3aed283e4453  
|   |   3bbe52db20ac37446a142ffeca  
|   |   |   71513e7423e0de96f48245b951  
|   |   |   |   9da45bf6a1f23  
|   |   |   |   |   00000_copper_coin_00000  
|   |   |   e83e655a7c4be5b76c93be42  
|   |   |   |   6db331cbfe3986ca705abef497  
|   |   |   |   cf6930c3  
|   6739c417b1b50  
|   |   35ff44bd8e372af59afa915f1cd  
|   |   |   32800213f39  
|   |   |   5f7eb81c3ea  
|   |   3e925930ebd96a094e59c8  
|   |   |   4fae33ea083a7a2b63109506dca34  
|   |   |   eb43b2c7666c
```



"the quieter you become, the

Questi comando li abbiamo già visti.

```
15 directories, 1 file

~/Garden/Maze
[mission 19] $ mv 53e3aed283e4453/3bbe52db20ac37446a142ffeca/9da45bf6a1f23/00000_copper_coin_00000 /home/kali/gameshell
gameshell/          gameshell.1/      gameshell-save.sh  gameshell.sh
Elle System
~/Garden/Maze
[mission 19] $ mv 53e3aed283e4453/3bbe52db20ac37446a142ffeca/9da45bf6a1f23/00000_copper_coin_00000 /home/kali/gameshell
gameshell/          gameshell.1/      gameshell-save.sh  gameshell.sh

~/Garden/Maze
[mission 19] $ mv 53e3aed283e4453/3bbe52db20ac37446a142ffeca/9da45bf6a1f23/00000_copper_coin_00000 /home/kali/gameshell.
gameshell.1/      gameshell.sh

~/Garden/Maze
[mission 19] $ mv 53e3aed283e4453/3bbe52db20ac37446a142ffeca/9da45bf6a1f23/00000_copper_coin_00000 /home/kali/gameshell.1/World/Forest/Hut/Chest/
Home

~/Garden/Maze
[mission 19] $ ls /home/kali/gameshell.1/World/Forest/Hut/Chest/
11315_tapestry_05  21929_tapestry_01  28330_tapestry_10  37401_tapestry_02  47109_tapestry_07  coin_1  coin_3      00000_copper_coin_00000  standard_1  standard_3
1692_tapestry_04   25632_tapestry_06  33245_tapestry_09  42289_tapestry_03  6243_tapestry_08  coin_2  journal.txt  painting_DbrmwBWa  standard_2  standard_4

~/Garden/Maze
[mission 19] $ gsh check

Congratulations, mission 19 has been successfully completed!
```

Missione n.20

```
└── ac465d751f0037
    └── cc1ff11c2168294
        ├── 0d3b0466
        |   ├── 57ccb47c86868
        |   ├── 914faf8f396301ec72de
        |   |   └── a8ebff9519120d6fabd36a6ba07
        |   ├── 9b374e704342bdbcb63ec
        |   |   ├── 1247ce7e79c165e44e64
        |   |   └── 3397cf463
        |   └── 603715e9c57f9e4a805e97bc003a0
        ├── ca8c27c842671aad113f
        |   ├── 5bd98c4a30
        |   └── 6cc8beeac58e617e89a
        └── ef5b6db849847144

40 directories, 1 file

~/Garden/Maze
[mission 20] $ mv 4bf1f83aa4f737941f/1dd1b0023876add38a993e7d6f9bd/06624747a3d7fbaf0/00000_silver_coin_00000 /home/kali/gameshell.1/World/Forest/Hut/Chest/
Home

~/Garden/Maze
[mission 20] $ cd /home/kali/gameshell.1/World/Forest/Hut/Chest/
bash: cd /home/kali/gameshell.1/World/Forest/Hut/Chest/: No such file or directory

~/Garden/Maze
[mission 20] $ cd /home/kali/gameshell.1/World/Forest/Hut/Chest/
Home

~/Forest/Hut/Chest
[mission 20] $ ls
11315_tapestry_05  21929_tapestry_01  28330_tapestry_10  37401_tapestry_02  47109_tapestry_07  coin_1  coin_3      00000_copper_coin_00000  painting_DbrmwBWa  standard_2  standard_4
1692_tapestry_04   25632_tapestry_06  33245_tapestry_09  42289_tapestry_03  6243_tapestry_08  coin_2  journal.txt  00000_silver_coin_00000  standard_1  standard_3

~/Forest/Hut/Chest
[mission 20] $ gsh check

Congratulations, mission 20 has been successfully completed!
```

anche qui comandi già visti.

Missione n.21

"the quieter you become, the more you are able to hear"

```
~/Garden/Maze
[mission 21] $ find . -type f
./8b313a827a0d15bba83ad68db2d9c8/e55fdf8a7f2d8c5002518fed3/1bf3a4023564/gold_coin_1
./bbdf5af3e0008/b64ebe884e7fb0fc7d1e58ac/277f7808fcebe705020/Gold_CoiN_2

~/Garden/Maze
[mission 21] $ mv 8b313a827a0d15bba83ad68db2d9c8/e55fdf8a7f2d8c5002518fed3/1bf3a4023564/gold_coin_1 /home/kali/gameshell.1/World/Forest/Hut/Chest/

~/Garden/Maze
[mission 21] $ mv bbdf5af3e0008/b64ebe884e7fb0fc7d1e58ac/277f7808fcebe705020/Gold_CoiN_2 /home/kali/gameshell.1/World/Forest/Hut/Chest/

~/Garden/Maze
[mission 21] $ cd /home/kali/gameshell.1/World/Forest/Hut/Chest/

~/Forest/Hut/Chest
[mission 21] $ ls
11315_tapestry_05 21929_tapestry_01 28330_tapestry_10 37401_tapestry_02 47109_tapestry_07 coin_1 coin_3 GolD_CoiN_2 00000_copper_coin_00000 painting_DbrmwbWa standard_2 standard_4
1692_tapestry_04 25632_tapestry_06 33245_tapestry_09 42289_tapestry_03 6243_tapestry_08 coin_2 gold_coin_1 journal.txt 00000_silver_coin_00000 standard_1 standard_3
```

find=il comando find, seguito dalle sue istruzioni, permette di trovare un nome contenuto in un file o directory, una tipologia di struttura che si sta cercando (file o directory), una parola contenuta in un file e molto altro!

Missione n.22

```
~/Mountain/Cave
[mission 22] $ find . -name cave

~/Mountain/Cave
[mission 22] $ cd /home/kali/gameshell.1/World/Mountain/Cave/

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

~/Mountain/Cave
[mission 22] $ head Book_of_potions/table_of_contents
1. Transformation potion ----- pages 1-2
2. Elixir of youth ----- pages 3-4
3. Philter of love ----- page 5
4. Bottled death (powerful poison) ----- page 6
5. Herbal tea ----- page 7
6. Draft of invisibility ----- pages 7-8
7. Homeopathic healing potion (part 1) ----- pages 8-9
8. Homeopathic healing potion (part 2) ----- page 10
9. Homeopathic healing potion (part 3) ----- page 11
10. Toadstool stew ----- page 12

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

head=head stampa le prime 10 righe dall'alto, l'opzione “-n k” ci permette di scegliere la quantità di righe da stampare a schermo.

- 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!

Missione n.23

```
~/Mountain/Cave  
[mission 23] $ cat Book_of_potions/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  
[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!

cat= stampa a schermo il contenuto di un file o directory a schermo senza usare il comando nano.

Tail=fa la stessa cosa del comando "head" ed ha le stesse istruzioni ma stampa le ultime righe partendo dal basso.

Missione n.24

```
~/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!



vedi missione 23.

Mission n.25

8. Homeopathic healing potion (part 2) ——————	page 10
9. Homeopathic healing potion (part 3) ——————	page 11
10. Toadstool stew ——————	page 12
11. Distilled water ——————	page 13
12. King's ale ——————	Page 13

abbiamo solo detto al comando cat di stampare due file on i loro percorsi.

~/Mountain/Cave

```
[mission 25] $ cat Book_of_potions/page_03 Book_of_potions/page_04
```

Elixir of youth

Warning: **do not** drink if you are older than 30.

- 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.

Mission n.26

~/Mountain/Cave

```
[mission 26] $ cat Book_of_potions/page_13
```

Distilled water

- 1) Boil water in a big pot.
- 2) Condense the vapor in a fresh container.
- 3) Add minerals for a better taste (optional).

King's ale

- 1) Go to the castle's cellar and grab a bottle.
- 2) Serve cold, in a pint.

~/Mountain/Cave

```
[mission 26] $ cat Book_of_potions/page_13 | head -n 6 | tail -n 3
```

- 1) Boil water in a big pot.
- 2) Condense the vapor in a fresh container.
- 3) Add minerals for a better taste (optional).

~/Mountain/Cave

```
[mission 26] $ gsh check
```

Congratulations, mission 26 has been successfully completed!

=questo comando si chiama pipe, serve per concatenare una serie di comandi dove il primo da un imput di scrittura e gli altri modificano quest'ultimo tramite dei parametri e comandi assegnati da noi, in questo caso usiamo “cat” per stampare a schermo, e usufruiamo dei comandi “head” e “tail” per indicare di mostrarc ci solo un pezzo di quel di quel file ovvero le righe 4,5,6.

Missione n.27-28

```
ps
PID TTY      TIME CMD
1893 pts/0    00:00:00 zsh
2210 pts/0    00:00:00 bash
2364 pts/0    00:00:01 bash
130125 pts/0   00:00:00 spell
132425 pts/0   00:00:00 ps

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


~/Mountain/Cave
[mission 27] $
*#@*
&_**/~
!$-#


~/Mountain/Cave
[mission 28] $ ps
PID TTY      TIME CMD
1893 pts/0    00:00:00 zsh
2210 pts/0    00:00:00 bash
2364 pts/0    00:00:01 bash
154181 pts/0   00:00:00 ps

~/Mountain/Cave
[mission 28] $ kill -9 14517
bash: kill: (14517) - No such process

~/Mountain/Cave
[mission 28] $ 
```

```
~/Mountain/Cave
[mission 27] $ ps
PID TTY      TIME CMD
1893 pts/0    00:00:00 zsh
2210 pts/0    00:00:00 bash
2364 pts/0    00:00:01 bash
133516 pts/0   00:00:00 ps

~/Mountain/Cave
~/Mountain/Cave
[mission 27] $ 
```

ps=ci permette di vedere i processi con i loro dettagli
kill=questo comando ci consente invece di “uccidere” un processo. Se un processo non si chiude, possiamo forzarlo usando il comando “kill -9 numero processo”, è equivalente ad una chiusura forzata.

Missione n.29

```
[mission 29] $ pstree 582620 -p
test-proc-name(582620)—sleep(582626)

~/Castle/Cellar
[mission 29] $ pstree 582652 -p
mischievous_imp(582652)—spell(582670)—sleep(589644)
                         └─spell(582671)—sleep(589718)
                           └─spell(582672)—sleep(589792)
                             └─tail(582673)

File System

~/Castle/Cellar
[mission 29] $ kill 582670

~/Castle/Cellar
[mission 29] $ kill 582671 582672

~/Castle/Cellar
[mission 29] $ pstree 582652 -p
mischievous_imp(582652)—tail(582673)
```

pstree=stampa a schermo una struttura ad albero dei processi attivi.

Missione n.30

nulla di rilevante, solo un gioco matematico.

Missione n.31

```
~/Castle/Main_building/Library  
[mission 31] $ gsh check < Mathematics_101  
66 * 15 = ?? 6 * 37 = ?? 62 * 98 = ?? 21 * 88 = ?? 90 * 95 =  
3 = ?? 47 * 28 = ?? 19 * 98 = ?? 69 * 14 = ?? 77 * 57 = ?? 97  
31 * 37 = ?? 98 * 43 = ?? 17 * 19 = ?? 56 * 58 = ?? 92 * 67 =  
84 = ?? 50 * 58 = ?? 70 * 63 = ?? 23 * 75 = ?? 68 * 1 = ?? 99  
3 * 58 = ?? 41 * 2 = ??  
Congratulations, mission 31 has been successfully completed!
```

While you are waiting, you see a fish swimming in circles ...

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

~/Castle/Main_building/Library
[mission 32] \$ █

<> = spiegherò questo comando solo qui. È un comando che ci permette di eseguire in base alla posizione delle istruzioni es(comando<file; file>comando; e i rispettivi reciproci di questi due comandi) più opzioni.

In questo caso stiamo dicendo che quando eseguiremo il comando “gsh check” il file “Mathematics_101” scriverà al posto nostro i risultati delle operazioni. In sintesi adopererà al posto nostro viceversa se le opzioni si scambiassero.

Missione n.32-33

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 32] $ touch inventory.txt  
  
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 32] $ cd ..  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ ls grimoire_* > ./Drawer/inventory.txt  
  
~/Castle/Main_building/Library/Merlin_s_office  
[mission 32] $ cd Drawer/  
  
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 32] $ less inventory.txt  
  
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 32] $ gsh check  
  
Congratulations, mission 32 has been successfully completed!  
  
While you are waiting, a duck swims by ...  
  
|  
--+-----+--  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands.  
--+-----+--  
|  
  
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 33] $ █
```

grimoire=restituisce a schermo solo ciò che specifichiamo di cercare.

less=mostra il contenuto di uno o più file di testo (o dello standard input) visualizzandolo una pagina per volta.

Missione n.34

```
~/Castle/Observatory  
[mission 34] $ ./merlin 2> FICHIER  
THESECRETKEYISONSTDERR  
  
~/Castle/Observatory  
[mission 34] $ cat FICHIER  
xWRetIXcnbbowWxxQcGXRoPhheTTisUKFBdcYPWITHDTzgaSeKHYWQcwXtaYHD  
  
~/Castle/Observatory  
[mission 34] $ gsh check < FICHIER  
What is the secret key?  
Congratulations, mission 34 has been successfully completed!  
  
|  
--+-----+--  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands.  
--+-----+--  
|  
  
~/Castle/Observatory  
[mission 35] $ █
```

Nulla di nuovo.

Mission n.35-36-37

```
~/Castle/Main_building/Throne_room  
[mission 35] $ chmod ugo+x Kings_quarter/  
  
~/Castle/Main_building/Throne_room  
[mission 35] $ cd Kings_quarter/  
  
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 35] $ gsh check  
  
Congratulations, mission 35 has been successfully completed!
```

chmod=ci permette di modificare i permessi dell'utente “u”, del gruppo “g”, e dell’owner “o”, di un file o una directory rispettivamente “rxe” aggiungendo permessi si usa “+” togliendoli si usa “-”

```
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 36] $ la  
note .secret_note  
  
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 36] $ ls -al  
total 16  
drwxr-xr-x 2 kali kali 4096 Jul 17 05:19 ./  
drwxr-xr-x 3 kali kali 4096 Jul 14 18:08 ../  
-rwxrwxrwx 1 kali kali 11 Jul 17 05:26 note  
--w---- 1 kali kali 11 Jul 17 05:26 .secret_note  
  
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 36] $ chmod ugo+rw .secret_note  
  
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 36] $ cat .secret_note  
3484915222  
  
~/Castle/Main_building/Throne_room/Kings_quarter  
[mission 36] $ gsh check < .secret_note  
What's the combination to open the King's safe?  
Congratulations, mission 36 has been successfully completed!
```

```
~/Castle/Main_building/Throne_room
[mission 37] $ ls -al
total 16
drwxr-xr-x 4 kali kali 4096 Jul 17 05:27 .
drwxr-xr-x 4 kali kali 4096 Jul 14 18:08 ..
drwxr-xr-x 2 kali kali 4096 Jul 17 05:19 Kings_quarter/
d----- 2 kali kali 4096 Jul 17 05:27 Safe/

~/Castle/Main_building/Throne_room
[mission 37] $ chmod ugo+rwx Safe/

~/Castle/Main_building/Throne_room
[mission 37] $ ls -al
total 16
drwxr-xr-x 4 kali kali 4096 Jul 17 05:27 .
drwxr-xr-x 4 kali kali 4096 Jul 14 18:08 ..
drwxr-xr-x 2 kali kali 4096 Jul 17 05:19 Kings_quarter/
drwxrwxrwx 2 kali kali 4096 Jul 17 05:27 Safe/

~/Castle/Main_building/Throne_room
[mission 37] $ cd Safe/
~/Castle/Main_building/Throne_room/Safe
[mission 37] $ ls
crown

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ cat crown
cat: crown: Permission denied

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ chmod ugo+rwx crown

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ cat crown
          jgs
(^_+_-)
(^/_\^/_)
\@*\@*\@/
{_136_}

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ journal

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ mv crown ~/Forest/Hut/Chest/

~/Castle/Main_building/Throne_room/Safe
[mission 37] $ gsh check
What are the 3 digits inscribed on the base of the crown? 136

Congratulations, mission 37 has been successfully completed!
```

Mission n.38

```
~/Garden/Maze
[mission 38] $ cat ./d1dd453c19f3cbfe0f7ef73d4bfd7b/d3563684094f2459253/23877ddb00dc/33547
33547 ruby 9351189863ec500829d68ef6ef86887799c6b76a

~/Garden/Maze
[mission 38] $ mv ./d1dd453c19f3cbfe0f7ef73d4bfd7b/d3563684094f2459253/23877ddb00dc/33547 ~/Forest/Hut/Chest/

~/Garden/Maze
[mission 38] $ gsh check

Congratulations, mission 38 has been successfully completed!
```

nulla di nuovo.

Missione n.39-40-41 vedi missione sui pipe.

```
~/Garden/Maze
[mission 39] $ find -type f | xargs grep -i diamond *
grep: 0edb92c40e0da5da6def221f: Is a directory
grep: 281f0876aa8c4f787d: Is a directory
grep: 3b20fa286e2db2124a0b2dc: Is a directory
grep: 55ddd3edcce6: Is a directory
grep: 8812334686bc1928dfeab63: Is a directory
grep: c86d70fd5ecb65eca22c86a5cd1b4: Is a directory
grep: c86f39f02a117b7e43479d8c50d1a: Is a directory
grep: f26109899e7009e08: Is a directory
grep: f402d1c681: Is a directory
grep: f5d1dca3ea0407fe1559adcc7d2: Is a directory
./3b20fa286e2db2124a0b2dc/7633560c8f304bba219f506/db2de290c:db2de290c diamond 2ddecff8a5527a8de73906d7e6b37073f4545d68

~/Garden/Maze
[mission 39] $ mv ./3b20fa286e2db2124a0b2dc/7633560c8f304bba219f506/d
d022f6466bcb15ff01b8866e db2de290c

~/Garden/Maze
[mission 39] $ mv ./3b20fa286e2db2124a0b2dc/7633560c8f304bba219f506/db2de290c ~/Forest/Hut/Chest/

~/Garden/Maze
[mission 39] $ gsh check

Congratulations, mission 39 has been successfully completed!
```

```
(0)
~/Stall
[mission 41] $ ls | grep -v "boring_object" | xargs grep -v "PAID" | wc
 44      392     2213
(1)
~/Stall
[mission 41] $ gsh check
How many unpaid items are there? 44
```

Congratulations, mission 41 has been successfully completed!

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

```
~/Stall
[mission 42] $ █
```

```
(0)
~/Stall
[mission 40] $ ls | grep -v "boring_object"
4b46ed6679b4f_s_c_r_o_l_l_4b46ed6679b4fdee
(1)
~/Stall
[mission 40] $ gsh check
How much does the king owe? ^C
(1)
~/Stall
[mission 40] $ grep King 4b
4b05dcecb_boring_object_4b05dcecb57c7fef      4b46ed6679b4f_s_c_r_o_l_l_4b46ed6679b4fdee
4b20d7b10283bbf_boring_object_4b20d7b10283bbff 4b62353f0_boring_object_4b62353f062dd916
4b24438752559e_boring_object_4b24438752559e13 4b6ba3b9_boring_object_4b6ba3b9032bb84e
4b422a247_boring_object_4b422a24752ff42c      4b6e42bbdd8_boring_object_4b6e42bbdd877912
(1)
~/Stall
[mission 40] $ grep King 4b
4b05dcecb_boring_object_4b05dcecb57c7fef      4b46ed6679b4f_s_c_r_o_l_l_4b46ed6679b4fdee
4b20d7b10283bbf_boring_object_4b20d7b10283bbff 4b62353f0_boring_object_4b62353f062dd916
4b24438752559e_boring_object_4b24438752559e13 4b6ba3b9_boring_object_4b6ba3b9032bb84e
4b422a247_boring_object_4b422a24752ff42c      4b6e42bbdd8_boring_object_4b6e42bbdd877912
(1)
~/Stall
[mission 40] $ grep King 4b
4b05dcecb_boring_object_4b05dcecb57c7fef      4b46ed6679b4f_s_c_r_o_l_l_4b46ed6679b4fdee
4b20d7b10283bbf_boring_object_4b20d7b10283bbff 4b62353f0_boring_object_4b62353f062dd916
4b24438752559e_boring_object_4b24438752559e13 4b6ba3b9_boring_object_4b6ba3b9032bb84e
4b422a247_boring_object_4b422a24752ff42c      4b6e42bbdd8_boring_object_4b6e42bbdd877912
(1)
~/Stall
[mission 40] $ grep King 4b46ed6679b4f_s_c_r_o_l_l_4b46ed6679b4fdee
the King bought a walking stick for 6 coppers -- PAID.
the King bought a knife for 3 coppers -- PAID.
the King bought a bag flour for 4 coppers.
the King bought a piece of soap for 6 coppers -- PAID.
the King bought an opal for 3 coppers.
the King bought a dented helmet for 6 coppers.
the King bought a ruby for 6 coppers.
the King bought a dented helmet for 6 coppers.
the King bought a shiny rock for 3 coppers -- PAID.
(2)
~/Stall
[mission 40] $ gsh check
How much does the king owe? 25
```

Congratulations, mission 40 has been successfully completed!

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ cat secret_message
tqdq ue yk iuxx:
kag iuxx sqf yk otqef, mzp qhqdkftuzs uf oazfmuze.
ftue otqef ue uz ftq oqxxmd, mzp ftq iadp fa ymwq
uf dq-mbbqmd ue: efaf
yqdxuz ftq qzotmzfqd

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ tr 'm-za-lM-ZA-L' 'a-zA-Z' < secret_message > message

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ cat message
here is my will:
you will get my chest, and everything it contains.
this chest is in the cellar, and the word to make
it re-appear is: stot
merlin the enchanter

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ cd ~/Castle/Cellar/

~/Castle/Cellar
[mission 42] $ stot
Command 'stot' not found, did you mean:
 command 'scot' from deb csound-utils
 command 'stat' from deb coreutils
 command 'stow' from deb stow
Try: sudo apt install <deb name>

~/Castle/Cellar
[mission 42] $ ls
18642_bat_4 22121_snowflake 22152_snowflake 26277_snowflake 27506_bat_4

~/Castle/Cellar
[mission 42] $ gsh check
What's the key that will make Merlin's chest to appear?
stot
```

Congratulations, mission 42 has been successfully completed!

Mission n.42

tr= serve per tradurre una cifratura criptata o semplicemente converte delle lettere o caratteri tramite la prima istruzione in dei caratteri della seconda istruzione che noi gli diamo per poi eseguire la traduzione come in figura.

CONGRATULATIONS!

You have finished all the missions.