

# Installazione e guida di Gameshell su Kali

## Ma cos' è Gameshell ?

Gameshell è un piccolo giochino creato e sviluppato per due motivi: il primo motivo è far divertire gli utilizzatori di Kali attraverso una piccola avventura interamente svolta da “terminale”.

Il secondo motivo è far prendere dimestichezza a chi è novizio con i comandi di “Kali”, perché come vedremo anche all'interno della guida, l'unico modo che avremo per spostarci e risolvere i vari enigmi del gioco sarà attraverso i vari comandi che l'utente andrà ad inserire.

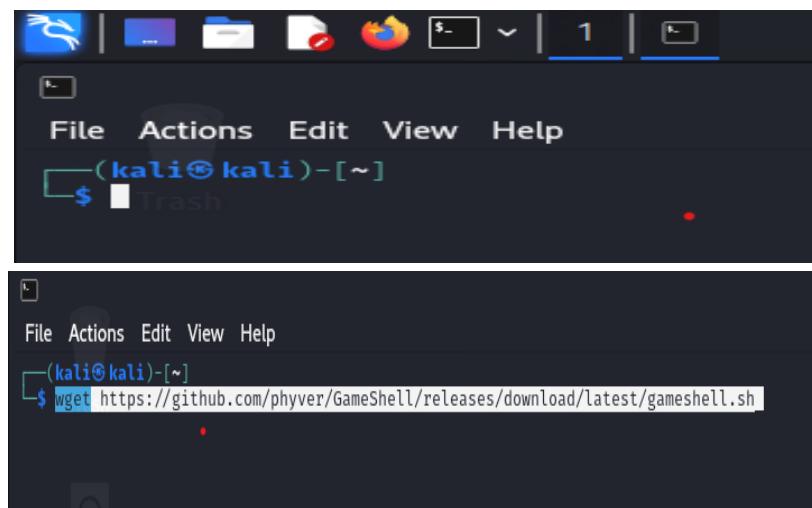
## Installazione di gameshell su “Kali”

Il primo passo da compiere è installare “Gameshell” su una macchina con Kali linux.

Per l'installazione bisogna assicurarsi che la “Kali” abbia una connessione a Internet.

Dopo aver controllato e confermato che la macchina “Kali” sia connessa, aprire il terminale e inserire il seguente comando:

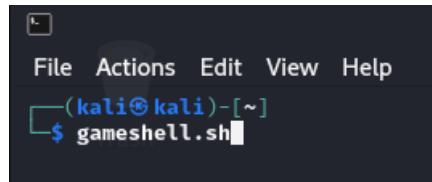
```
 wget https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh
```



The screenshot shows a Kali Linux desktop environment. At the top, there is a dock with icons for the Dash, Home, File Manager, Terminal, and a browser. Below the dock is a menu bar with 'File', 'Actions', 'Edit', 'View', and 'Help'. A system tray icon is visible. The main area is a terminal window titled '(kali㉿kali)-[~]'. The command \$ wget https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh is typed into the terminal, and the cursor is positioned after it. The terminal has a dark theme with light-colored text.

Una volta inserito il comando, partirà il download, dopodichè basterà inserire il comando:

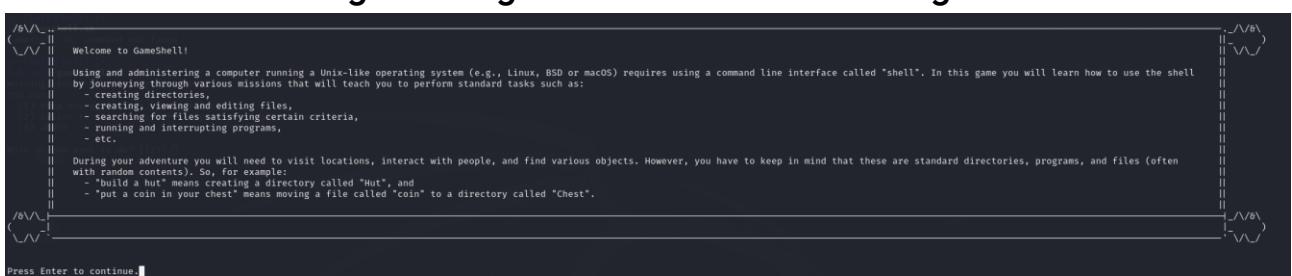
**bash gameshell.sh** per iniziare a giocare



Dato l'ok vi apparirà su schermo il menù del gioco



Premete invio e subito dopo vi ritroverete una schermata con tutto le linee guida e gli avvertimenti dati dagli autori



Ripremete “invio”

E verrete catapultati direttamente alla prima missione

```
| gameshell.sh
+-----+
| Run the command
| $ gsh goal
| to discover your first mission.
| Warning: there is a more recent savefile
| You can check the mission has been completed with
| [1) Key $ gscheck file (gameshell.sh)
| [2) switch to the last savefile (gameshell-save.sh)
| The command
| $ gsh help
| displays the list of available (gsh) commands.
+-----+
|
[mission 1] $ █
```

Come potete vedere non ci apparirà direttamente la missione, ma una lista di comandi utili per proseguire. Assieme ad essi vi varrà data anche la spiegazione dei suddetti comandi.

## Guida

### Attenzione

In questa guida non saranno presenti tutti i livelli del gioco, anche, per lasciare a voi il piacere e il divertimento nello svolgere e risolvere enigmi e missioni varie.

Saranno presenti solo le prime missioni di ogni comando che dovremo imparare.

### Missione n1

```
Mission goal
=====
Go to the top of the main tower of the castle.

Useful commands
=====

cd LOCATION
Move to the given location.
Remark: ``cd'' is an abbreviation for "change directory".

pwd
Show the path to your current location.
Remark: ``pwd'' is an abbreviation for "print working directory".

ls
Show a list of locations that are currently accessible.
Remark: ``ls'' is an abbreviation of "list".

gsh check
Check if the mission objective has been achieved.

[Press space to continue, q to quit.] █
```

Come potete vedere la prima missione vi chiede di raggiungere la vetta della torre attraverso i comandi “**cd**”, “**pwd**” e “**ls**”.

Non spaventatevi, il gioco vi spiegherà la funzione dei comandi e cosa stanno a significare nella sezione “**Useful commands**”.

Il primo passo è scrivere “**pwd**”, questo serve per farci capire dove ci troviamo nel momento in cui diamo il comando.

```
[use 'gsh help' to get a list of available commands]
[mission 1] $ pwd
/home/kali/Desktop/gameshell/World
```

In questo caso potete ben vedere che ci troviamo nel “**World**”.

Dopo aver inserito qualsiasi comando il programma sarà di nuovo pronto a riceverne altri.

```
[mission 1] $ pwd
/home/kali/gameshell.3/World
    | Useful commands
[use 'gsh help' to get a list of available commands]
[mission 1] $ █
    | find
```

Ora andiamo a dare il comando “**ls**” ossia “**list**”

```
[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Castle Forest Garden Mountain Stall
```

Come vedete ci verrà data una vera e propria lista in questo caso formata da

**Castle, Forest, Garden, Mountain, Stall.**

Ora che sappiamo dove siamo (**pwd**) e dove possiamo andare (**ls**), non ci resta che muoverci (**cd**), in questo caso dobbiamo raggiungere la cima della torre del Castello quindi andate ad inserire il comando

**Cd Castle**

```
[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Castle
    | Search files/directories from the current w
```

una volta inserito e inviato vedrete che non ci sarà alcun cambiamento visivo, ma se gli ridarete il comando “**pwd**” vedrete che ora non vi trovate più nel “**World**” ma bensì nel “**Castle**”

```
[use 'gsh help' to get a list of available commands]
[mission 1] $ pwd
/home/kali/gameshell.3/World/Castle
```

Da qui non vi resta che seguire le istruzioni sopraelencate e raggiungere la cima della torre principale del castello

```
[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Castle Forest Garden Mountain Stall

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd castle
bash: cd: castle: No such file or directory

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Castle

[use 'gsh help' to get a list of available commands]
[mission 1] $ pwd
/home/kali/Desktop/gameshell/World/Castle

[use 'gsh help' to get a list of available commands]
[mission 1] $ pwd
/home/kali/Desktop/gameshell/World/Castle

[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Cellar Great_hall Main_building Main_tower Observatory
Backdoor_PV
[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Main_tower

[use 'gsh help' to get a list of available commands]
[mission 1] $ pwd
/home/kali/Desktop/gameshell/World/Castle/Main_tower
client_back...
[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
First_floor

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd First_floor
gameshellish

[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Second_floor

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Second_floor
bash: cd: Second_flor: No such file or directory

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Second_floor

[use 'gsh help' to get a list of available commands]
[mission 1] $ ls
Top_of_the_tower

[use 'gsh help' to get a list of available commands]
[mission 1] $ cd Top_of_the_tower

[use 'gsh help' to get a list of available commands]
[mission 1] $ gsh check

Congratulations, mission 1 has been successfully completed!
```

Nell’immagine sopraelencata vi sono tutti i passaggi da fare per raggiungere la cima. Una volta raggiunta, date il comando “**gsh check**” per sapere se la missione è andata a buon fine o meno.

## Missione n2

```
[mission 2] $ gsh start
Mission goal
=====
Go the castle's cellar.

Secondary objective
=====
Understand the difference between ``cd -`` and ``cd ..``.

gameshell
Useful commands
=====

cd -
Jump back to the location you were in prior to your last move.

cd ..
Move to the parent directory (one step back along the path to your current location).

pwd
See the path to your current location.

gameshell...
[use 'gsh help' to get a list of available commands]
[mission 2] $
```

La seconda missione vi presenta e vi spiega altri comandi da utilizzare per spostarvi tra i vari ambienti, in questo caso vi presenta il “**c-**” e il “**c ..**”.

Come potete leggere la missione, stavolta, vi richiede di recarvi nelle celle del castello, per entrarvi basta tornare indietro con il comando “**c ..**” fino al “**castle**” poi dare il comando “**ls**”

```
[use 'gsh help' to get a list of available commands]
[mission 2] $ pwd
/home/kali/Desktop/gameshell/World/Castle

[use 'gsh help' to get a list of available commands]
[mission 2] $ ls
Cellar  Great_hall  Main_building  Main_tower  Observatory

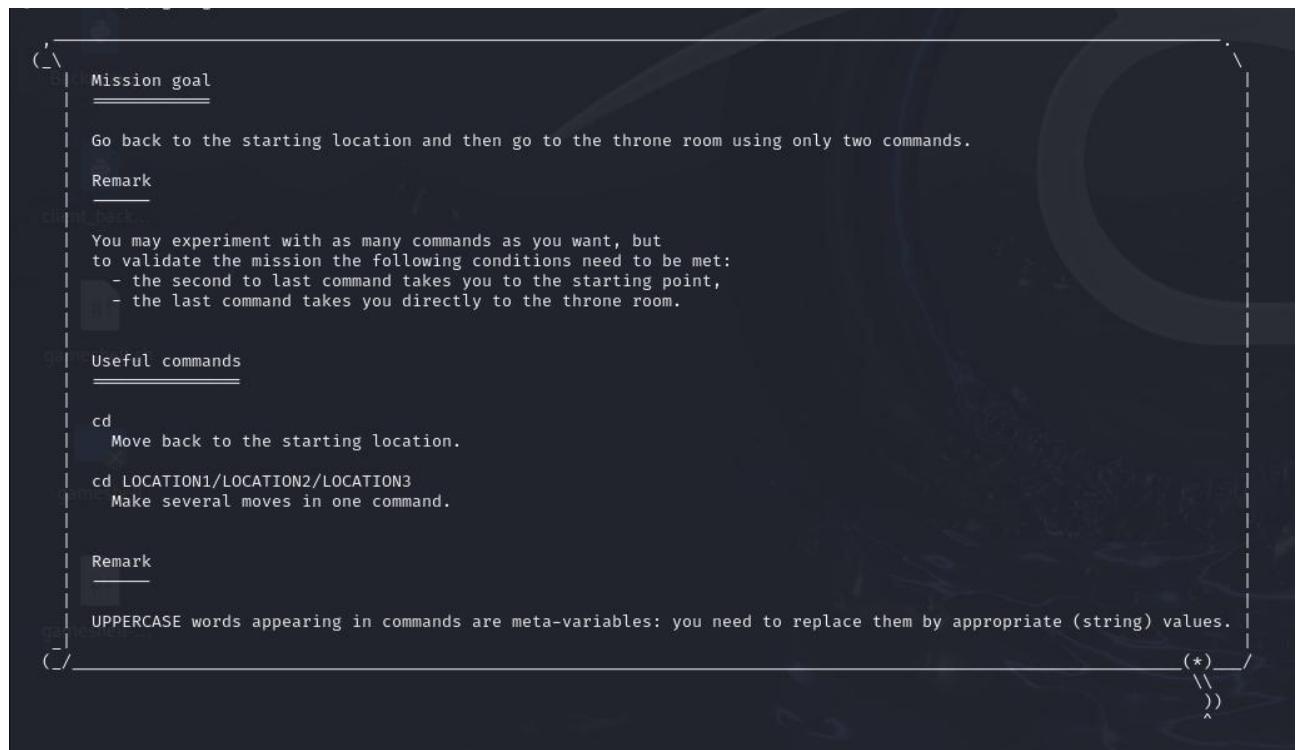
[use 'gsh help' to get a list of available commands]
[mission 2] $ cd Cellar

[use 'gsh help' to get a list of available commands]
[mission 2] $ pwd
/home/kali/Desktop/gameshell/World/Castle/Cellar

[use 'gsh help' to get a list of available commands]
[mission 2] $ gsh check
Congratulations, mission 2 has been successfully completed!
```

E vi comparirà “**Cellar**” ,dopodichè dare il comando “**cd Cellar**” e vi ritroverete al loro interno. Non vi resta che dare il comando “**gsh check**” e la missione sarà completata.

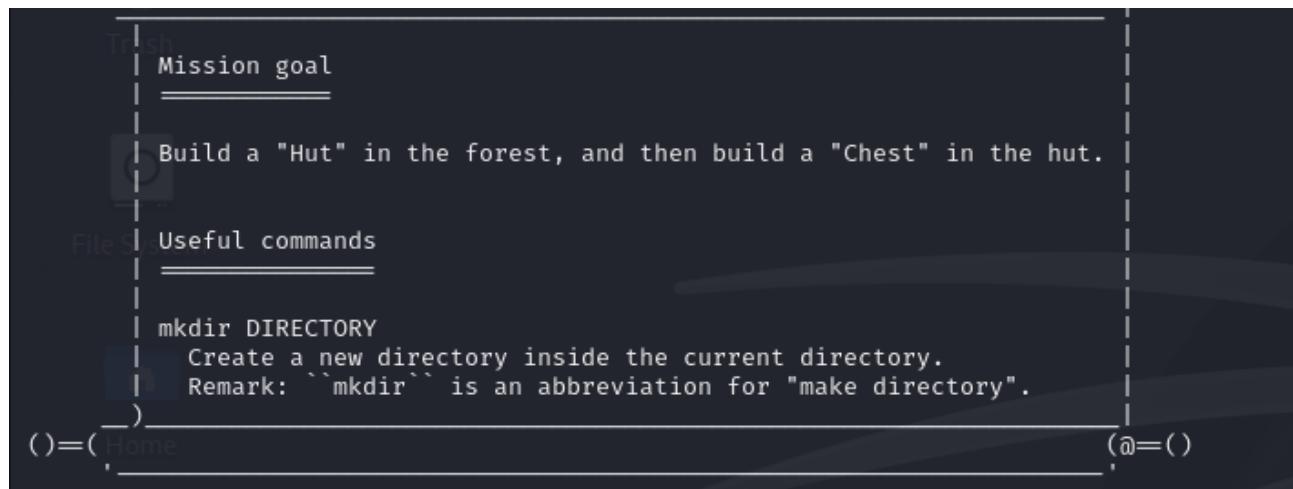
## Missione n3



La terza missione vi chiede di ritornare al punto d'inizio e andare nella sala del trono usando solo due comandi, per fare ciò bisogna dare il comando “**cd**” e vi riporterà al “**World**” e successivamente dare il comando “**cd Castle/Main\_building/Throne\_room**” premere invio e vi ritroverete automaticamente al interno della sala del trono.



## Missoine n4



Nella seguente missione ti viene chiesto di costruire una “**Hut**” nella foresta e di costruire successivamente una “**Chest**” nella “**Hut**”.

Come scritto anche all'interno del riquadro per “**costruire**” abbiamo bisogno del comando “**mkdir**”, conosciuto il comando ci basta andare nella foresta, sempre tramite i comandi “**cd**” “**cd ..**” e “**ls**”, e dare il comando “**mkdir Hut**” successivamente il comando “**cd Hut**” e infine il comando “**mkdir Chest**”.

Dare il comando “**gsh check**” e la missione sarà completa.

```
~/Forest
[mission 4] $ pwd
/home/kali/Desktop/gameshell/World/Forest

~/Forest
[mission 4] $ cd Hut
bash: cd: Hut: No such file or directory

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

~/Forest
[mission 4] $ cd Hut
[gamehell]
~/Forest/Hut
[mission 4] $ pwd
/home/kali/Desktop/gameshell/World/Forest/Hut

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

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

Congratulations, mission 4 has been successfully completed!

[ progress was saved in /home/kali/Desktop/gameshell-save.sh ]
```

## Missione n5

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

  \_ \
  |   Mission goal
  |
  +-- Useful commands
  |
  |   rm FILE1 FILE2 ... FILEn
  |       Delete the files (permanently).
  |       Remark: ``rm'' is an abbreviation for "remove".
  |
  +-- Background
      \_ /:.
```

La missione numero 5 ci chiede di entrare nelle caverne e uccidere i ragni lasciando solo i pipistrelli.

Per fare ciò abbiamo bisogno di andare all'interno delle caverne, sempre tramite gli appositi comandi, una volta entrati all'interno delle caverne dare il comando “ls” per vedere la lista, in questo caso di animali, presenti nella caverna e successivamente dare il comando “**rm spider\_1 spider\_2 spider\_3**” per eliminare solo ed esclusivamente i ragni.

Dare il comando **gsh check** e controllare che la missione sia andata a buon fine.

```
~/Castle/back...
[mission 5] $ cd 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

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

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

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

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

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

## Missione n6

```
~/Castle/Cellar
[mission 6] $ gsh goal

Mission goal
_____
Collect all the coins that you can find in the garden in front of the castle, and put them in your chest in the forest.

Useful commands
_____
mv FILE1 FILE2 ... FILEn DIRECTORY
Move the files to the directory.
Remark: "mv" is an abbreviation of "move".

The "~" symbol is an abbreviation for the initial directory.
Example: wherever you are, "~/Tavern" denotes the directory (or file) "Tavern" in the initial directory.
```

La missione numero 6 ti chiede di trovare le monete all'interno del giardino e posizionarle all'interno della “**Chest**”.

Per fare ciò usare il comando “**mv**” come scritto anche nell’immagine sopra. Dopo aver raggiunto il giardino e trovate le monete, per spostarle all’interno della “**Chest**” basta scrivere il comando “**mv coin\_1 coin\_2 coin\_3 ~/Forest/Hut/Chest**”. Se ora provate a ricontrizzare le monete saranno sparite dal giardino e saranno state spostate all’interno della “**Chest**”.

Dopo aver svolto la missione dare il comando “**gsh check**” e controllare che la missione sia stata svolta correttamente.

```
~/Castle/Cellar
[mission 6] $ cd Backdoor.py
~
[mission 6] $ ls
Castle Forest Garden Mountain Stall

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

~/Garden
[mission 6] $ mv coin_1 coin_2 coin_3 ~/Forest/Hut/Chest
~/Garden
[mission 6] $ ls
Flower_garden Maze Shed

~/Garden
[mission 6] $ gsh check
Congratulations, mission 6 has been successfully completed!
[ progress was saved in /home/kali/gameshell-save.sh ]
```

## Missione n7

```
~/Garden
[mission 7] $ gsh goal
Mission goal
=====
Collect all the coins hidden in the garden in front of the castle, and put them in your chest (in your hut in the forest).

Secondary objective
=====
Learn how to use the "Tab" key to go faster.

Useful commands
=====
ls -A
List all the files of the current directory, including hidden files. (A file is "hidden" when its name starts with a dot.)

Tab
The tabulation key "completes" the name of a file or directory once you have typed the beginning of its name. This only works if there is only one possible completion.

Tab-Tab
Pressing tabulation twice successively shows a list of possible completions.

gameshell.sh
```

La missione numero 7 ci introduce un nuovo comando ossia "**ls -A**" questo nuovo comando ti servirà per scoprire i file nascosti.

Detto questo, la missione ti richiederà di trovare le monete nascoste sempre nel giardino.

Per fare ciò ci basta dare il comando "**ls -A**" e ci compariranno a schermo le monete nascoste, ripetere il comando "**mv**" come nell'esercizio precedente e il gioco è fatto.

Dopo aver svolto l'esercizio dare il comando "**gsh check**" e controllare che la missione sia stata correttamente svolta.

```
~/Garden
[mission 7] $ mv .
./          ../
              .15885_coin_3  .33832_coin_1  .34497_coin_2

~/Garden
[mission 7] $ mv .15885_coin_3  .33832_coin_1  .34497_coin_2 ~/Forest/Hut/Chest

~/Garden
[mission 7] $ gsh check

Congratulations, mission 7 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]
```

# Missione n8

Mission goal

Get rid of all the spiders that are crawling in the cellar. Again, do not do not disturb the bats.

Shell patterns

\*

The "\*" character stands in for any sequence of characters (including an empty sequence).

?

The "?" character stands in for any single character.

Those wildcards can be used to denote lists of existing files / directories in the current working directory.

For example: if the current folder contains  
file-1 Folder-1 file-14 potato  
then

*	→	file-1 Folder-1 file-14 potato
*1	→	file-1 Folder-1
*o*	→	Folder-1 potato
xx	→	error, no matching file
*-?	→	file-1 Folder-1
*-??	→	file-14

La missionenumero 8 ci richiede invece di togliere tutti i ragni dalla cella, proprio come nella missione numero 5, solo che ora hai a disposizione dei nuovi comandi, ossi “**\***” e “**?**”.

Questi ci permetteranno di selezionare una gran quantità di elementi, avente lo stesso nome, numeri e caratteri speciali.

In questo caso all'interno della caverna avrai una gran quantità di ragni ma per eliminarli tutti ti basterà dare il comando “**rm \*\_spider\_\***” e automaticamente eliminerai tutti i ragni con un unico comando.

```
~/Castle
[mission 8] $ cd Cellar
-/Castle/Cellar
[mission 8] $ ls
10490_spider_15 10708_spider_21 10156_spider_45 20051_spider_7 22045_spider_2 21805_spider_3 26070_spider_1 26880_spider_4 31603_spider_49 4645_spider_44 6443_spider_14 barrel_of_apples
15102_spider_19 16592_spider_29 20093_spider_39 22897_bat_5 24029_spider_28 2665_spider_51 29274_spider_26 28689_spider_10 4810_spider_38 8883_spider_37
11348_spider_23 15131_spider_33 18248_spider_11 21169_spider_22 2272_spider_18 24617_spider_6 27627_spider_47 29702_spider_12 3491_spider_35 5507_spider_13 8963_spider_25
11464_spider_37 15141_bat_3 19346_spider_8 21251_bat_1 23429_spider_40 25242_spider_42 28289_spider_10 30210_spider_24 3978_spider_20 5949_spider_27 9007_bat
11_spider_46 15240_spider_36 20020_spider_5 21416_spider_32 23779_spider_38 25259_spider_16 2871_spider_46 31316_bat_4 4344_spider_17 6044_spider_43 9519_spider_41

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

-/Castle/Cellar
[mission 8] $ rm *_spider_*
-/Castle/Cellar
[mission 8] $ gsh check

Congratulations, mission 8 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]
```

## Missione n10

```
~/Castle/Cellar  
[mission 10] $ gsh goal  
  
Mission goal  
  
You have taken a fancy to the four standards in the great hall of the castle. As stealing them would not go unnoticed, put a copy (same name, same content) of each in your chest.  
  
Useful commands  
  
cp FILE DIRNAME  
Copy the file to the directory.  
Remark: "cp" is an abbreviation of "copy".
```

Nella missione numero nove ci verrà richiesto di copiare i quattro stendardi, questo puoi farlo grazie al nuovo comando che ti verrà dato, ossia “**cp**”.

Per completare questa missione ti basterà recarti nella grande sala vedere gli stendardi tramite il comando “**ls**” e successivamente dare il comando “**cp standard\_1 standard\_2 standard\_3 standard\_4 ~/Forest/Hut/Chest**” e automaticamente verranno copiati all'interno della “**Chest**”.

Fatto ciò dare il comando “**gsh check**” e assicurarsi che la missione sia stata svolta in maniera corretta.

```
~/Castle/Cellar  
[mission 10] $ cd Great_hall  
  
~/Castle/Great_hall  
[mission 10] $ ls  
4183_decorative_shield 59269_stag_head 63760_suit_of_armour standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ ls -A  
4183_decorative_shield 59269_stag_head 63760_suit_of_armour standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ cp standard_1 standard_2 standard_3 standard_4  
cp: target 'standard_4': Not a directory  
  
~/Castle/Great_hall  
[mission 10] $ cp standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 10] $ gsh check  
  
Congratulations, mission 10 has been successfully completed!  
[ progress was saved in /home/kali/gameshell-save.sh ]
```

# Missioni n11

```
[mission 11] $ gsh goal

/ \
| | Mission goal
\_ \_ _____ gameshell.....
| |
| The tapestries in the castle's great hall are also particularly beautiful. Put a copy of each in your chest.
| |
| Useful commands
| _____
| cp FILE1 FILE2 ... FILEn DIRNAME
| Copy the files to the directory.
| Remark: ``cp`` is an abbreviation of "copy".
| |
| Shell patterns
| _____
| *
| The "*" character stands in for any sequence of characters
| (including an empty sequence).
| ?
| The "?" character stands in for any single character.
| /
```

**Seguire gli stessi comandi usati per l'esercizio n8**

```
~/Castle/Great_hall
[mission 11] $ cd
cd: Great_hall: No such file or directory
~
[mission 11] $ cd Castle
bash: cd: Castle: No such file or directory
~
[mission 11] $ cd Castle
~/Castle
[mission 11] $ cd Great_hall
~/Castle/Great_hall
[mission 11] $ ls
10756_tapestry_03    22310_tapestry_06  23156_tapestry_04      36962_tapestry_05  39407_tapestry_08  40160_tapestry_02  59432_tapestry_09  standard_2   standard_4
13902_suit_of_armour 22524_stag_head   31399_decorative_shield 39222_tapestry_10  40150_tapestry_07  40835_tapestry_01  standard_1   standard_3

~/Castle/Great_hall
[mission 11] $ cp *_tapestry_* ~/Forest/Hut/Chest

~/Castle/Great_hall
[mission 11] $ gsh check

Congratulations, mission 11 has been successfully completed!
```

# Missioni n12

Mission goal

While wandering around the first floor of the main tower, some magnificent paintings catch your eye. Add a copy of the oldest one to your chest.

Secondary objectives

Take a moment to admire the sheer beauty of the paintings.

Useful commands

`ls -l`  
Print the list of files of the current directory, with additional information including last modification date.

`cat FILE`  
Display the contents of the file.

La missione numero 12 ci richiede invece di copiare il dipinto più vecchio presente al primo piano, per fare ciò dovrà dare il

comando “**ls -l**” e assieme ai dipinti usciranno anche altre informazioni.

Vedi quella più vecchia e col comando “**cp**” vai a mettere la copia nella “**Chest**”.

```
~/Castle/Main_tower/First_floor
[mission 12] $ ls -l
total 16
-rw-rw-r-- 1 kali kali 1455 Apr  4  1989 painting_Mf0qzggD
-rw-rw-r-- 1 kali kali 1055 Sep 26  1997 painting_vtDfyEUM
-rw-rw-r-- 1 kali kali 1502 May  6  2014 painting_vtTxfyjE
drwxrwxr-x 3 kali kali 4096 Apr 19 14:37 Second_floor/
~/Castle/Main_tower/First_floor
[mission 12] $ cat FILE
cat: FILE: No such file or directory
~/Castle/Main_tower/First_floor
[mission 12] $ cp ?1989 painting_Ms0qzggD? ~/Forest/Hut/Chest
cp: cannot stat '?1989': No such file or directory
cp: cannot stat 'painting_Ms0qzggD?': No such file or directory
~/Castle/Main_tower/First_floor
[mission 12] $ cp *painting_M* ~/Forest/Hut/Chest
~/Castle/Main_tower/First_floor
[mission 12] $ gsh check

Congratulations, mission 12 has been successfully completed!
```

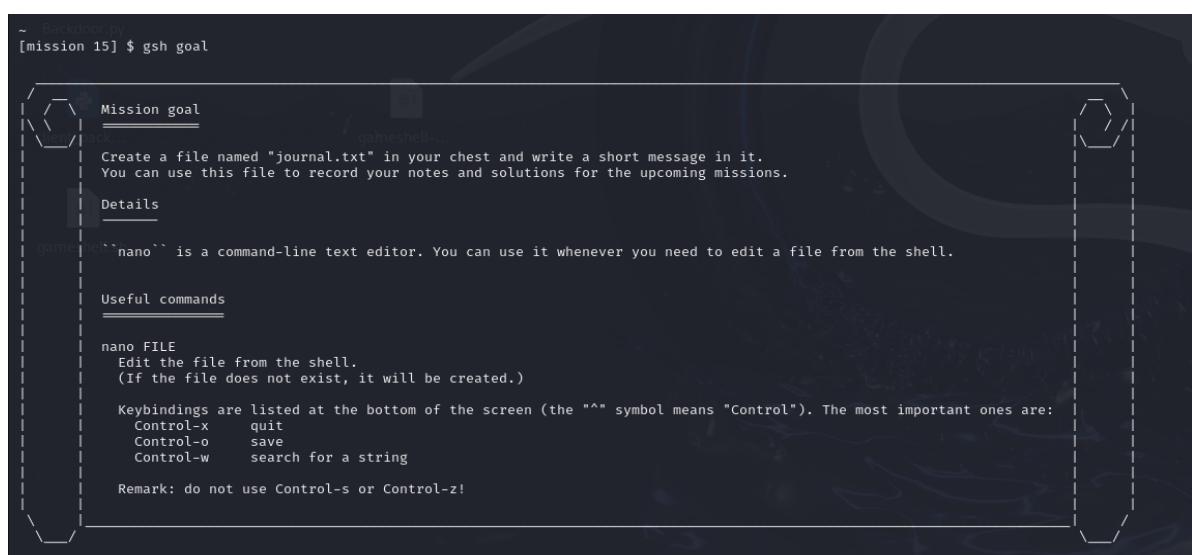
# Missione n14

Qui ti verrà dato un nuovo comando che ti darà la possibilità di semplificare i comandi complessi come ad esempio in questo caso l'esercizio, tramite il comando “**alias**”, ci farà semplificare il comando “**ls -A**” in “**la**”, tramite la linea di comando “**alias la='ls -A'**”.

Una volta svolta la modifica, proprio tramite il nuovo comando andrai a cercare il diamante nel primo piano, per poi prenderlo tramite il comando “**cat**”

```
~/Castle/Main_tower/First_floor  
[mission 14] $ alias la='ls -A'  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ ls  
painting_Mf0qzggD painting_vtDfyEUM painting_vtTxfyjE Second_floor/  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ la  
.nice_rock painting_Mf0qzggD painting_vtDfyEUM$ painting_vtTxfyjE Second_floor/  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ cat .nice_rock  
.  
.  
- /shell -  
.'\.' /'.'  
.'\.'  
Donovan Bake  
  
~/Castle/Main_tower/First_floor  
[mission 14] $ gsh check  
  
Congratulations, mission 14 has been successfully completed!
```

## Missione n15



Nella missione numero 15 ti viene chiesto di creare un file txt e di metterlo nello Chest presente nella foresta.

Questo viene fatto tramite il comando “**sudo nano**”, una volta dato il comando e salvato ti basterà spostare il file “**Journal.txt**” nella chest tramite il comando “**mv**”.

```
~/Forest/Hut/Chest
[mission 15] $ pwd
/home/kali/gameshell-World/Forest/Hut/Chest save.sh

~/Forest/Hut/Chest
[mission 15] $ nano

~/Forest/Hut/Chest
[mission 15] $ nano FILE

~/Forest/Hut/Chest
[mission 15] $ nano journal.txt

~/Forest/Hut/Chest
[mission 15] $ gsh check

Congratulations, mission 15 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]
```

## Missioni n16

```
[mission 16] $ gsh goal

/b\_\_`
( \_/\_`
  Mission goal
  _____
  Create an alias "journal" in order to easily edit your journal file wherever you are.
  _____
  Details
  _____
  To edit the journal file with ``nano`` from, for example, the cellar or the throne room, you need to give the full path to the file: ``~/Forest/.../journal.txt``.
  To avoid typing this long command each time, you can create an alias just like
  alias la='ls -a'
  _____
  Useful commands
  _____
  nano FILE
  Edit the file from the shell.
  (If the file does not exist, it will be created.)
  alias STRING='COMMAND'
  Create a synonym for a string, that will stand for a command.
  _____
  Note
  _____
  If (and only if) you know what you're doing, you can use the ``EDITOR`` variable to define your favorite editor and use it in the alias.
  _____
/b\_\_`
\_/\_`
```

Mentre nella missione 16 ti verrà chiesto di creare l'alias per il "journal" questo puoi farlo seguendo le istruzioni delle missioni

precedenti.

```
~/Forest/Hut/Chest
[mission 16] $ alias journal='nano ~/Forest/Hut/Chest/journal.txt'

~/Forest/Hut/Chest
[mission 16] $ gsh check

Congratulations, mission 16 has been successfully completed!
Backdoor.py
```

## Missione n17

```
~[mission 17] $ gsh goal
At the back of the cellar, there is a small opening going to the spider queen's lair.
Go there, and remove the spider queen (and nothing else).

Note: you have a limited amount of time (20 seconds) to do that. You can use the command ``gsh reset`` to reset the timer.

Another thing: shell patterns have been deactivated. You cannot use the wildcards ``*`` or ``?``.

Useful commands
Tab
The "Tabulation" key completes the name of a file or directory once you have typed the beginning of its name. This only works if there is only one possible completion.

Tab-Tab
Pressing the "Tabulation" key twice successively shows a list of possible completions.
```

**La missione numero 17 ti richiede di andare a togliere solo ed esclusivamente la regina dei ragni in un tempo limite di 20 secondi. Per fare ciò ti consiglio di arrivare alle porte della caverna e ricominciare la missione, appena ricomincia segui i comandi dell'immagine sottostante.**

```
~/Castle/Cellar
[mission 17] $ pwd
/home/kali/gameshell/World/Castle/Cellar

~/Castle/Cellar
[mission 17] $ ls
.11283_bat_5 15141_bat_3 .15945_bat_3 .20826_bat_4 21251_bat_1 22697_bat_5 .27983_bat_2 31316_bat_4 .7161_bat_1 9007_bat_2 barrel_of_apples .Lair_of_the_spider_queen xtwMUDOriwBTB0Y RcjEXzAICCKbjJDC/
~/Castle/Cellar
[mission 17] $ cd .Lair_of_the_spider_queen\ xtwMUDOriwBTB0Y RcjEXzAICCKbjJDC/
~/Castle/Cellar/.Lair_of_the_spider_queen xtwMUDOriwBTB0Y RcjEXzAICCKbjJDC
[mission 17] $ la
qRZqsYltBeRQccAL_spider_queen_psypPSigQQXwtky VnUtlPTelutFylTl_baby_bat_FYTavSbfWRWPoTg
~/Castle/Cellar/.Lair_of_the_spider_queen xtwMUDOriwBTB0Y RcjEXzAICCKbjJDC
[mission 17] $ rm qRZqsYltBeRQccAL_spider_queen_psypPSigQQXwtky
~/Castle/Cellar/.Lair_of_the_spider_queen xtwMUDOriwBTB0Y RcjEXzAICCKbjJDC
[mission 17] $ gsh check
Perfect, it took you only 18 seconds to complete this mission!

Congratulations, mission 17 has been successfully completed!
[ progress was saved in /home/kali/gameshell-save.sh ]
```

# Missione n19

```
Mission goal
=====
The king's pyrotechnician appears next to you. He asks you to fire **at least 3 consecutive fireworks** so he can see them from far away.

A single firework can be created with the magical word
client> flarigo      gmeshell>

Useful commands
=====
flarigo
This (non standard) command creates a single small firework.

COMMAND &
Run the given command, but don't wait until it is finished to return.
The command will run in the "background".

COMMAND1 ; COMMAND2 ; ... ; COMMANDn
Run the given commands one after the other.
Each command is run when the previous one is finished.

COMMAND1 & COMMAND2 & ... & COMMANDn
Run the given commands "in parallel".
All the commands are run in the "background", except the last one.

[mission 19] $
```

la missione numero 19 invece ci chiede di creare una sequenza di fuochi d'artificio tramite il comando “**flarigo**”.

Per fare ciò bisogna inserire il comando `flarigo` seguito da “`&`” in modo da creare una

sequenza di fuochi in parallelo seguito subito dopo da “**gsh check**”.

```
[mission 19] $ flarigo & flarigo & flarigo & gsh check
[1] 22110
[2] 22111
[3] 22112
File System
Let's have a look:
Home
Backdoor
Backdoor.py
client_back...
gameshell...
gameshell.sh
[1]- Done          flarigo
[2]- Done          flarigo
[3]+ Done          flarigo
Great, that looked good!

Congratulations, mission 19 has been successfully completed!
[ progress was saved in /home/kali/gameshell-save.sh ]
```

# Missione n20

**La missione numero 20 ti chiederà di indovinare la sequenza di lettere per il gran finale.**

Le quattro lettere non sono altro che la parola “oops”

```
~  
[mission 20] $ gsh check  
What's a valid 4 letters sequence? oops  
  
Congratulations, mission 20 has been successfully completed!  
  
[ progress was saved in /home/kali/gameshell-save.sh ]
```

# Missione n21

**La missione numero 21 ti propone la ricerca di un copper coin nel labirinto del giardino e di spostarlo nella chest.**

## Seguendo i comandi precedenti non dovrebbero esserci problemi

```

~ [mission 21] $ cd Garden
~/Garden [mission 21] $ cd Maze
~/Garden/Maze [mission 21] $ ls
865a4a2e540caabd944bb931252bf3/ cb1d64d6acb994e293ce736358/
~/Garden/Maze [mission 21] $ cd 865a4a2e540caabd944bb931252bf3/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3$ gshell...
[mission 21] $ ls
6d2c9f4d07bf21916dc28b5b09f933/ af46cf37fe6e24b804962487b27/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3 [mission 21] $ cd 6d2c9f4d07bf21916dc28b5b09f933/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3 [mission 21] $ ls
11ff893c49fc48f1ac1856d/ 85d1f0a8e5651b054c7/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3/6d2c9f4d07bf21916dc28b5b09f933 [mission 21] $ cd 85d1f0a8e5651b054c7/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3/6d2c9f4d07bf21916dc28b5b09f933 [mission 21] $ mv 00000_copper_coin_00000 ~/Forest/Hut/Chest/
~/Garden/Maze/865a4a2e540caabd944bb931252bf3/6d2c9f4d07bf21916dc28b5b09f933/85d1f0a8e5651b054c7 [mission 21] $ gsh check
Congratulations, mission 21 has been successfully completed!

```

## Missione n22

```

~/Garden/Maze [mission 22] $ gsh goal
()=(`gshell` @=())
Mission goal
Find the silver coin in the maze in the garden and move it to your chest using the shell.

Useful commands
ls -R
Print the list of all files / directory, including those in sub-directories (recursively).
tree
Print the tree of files and directories, starting from the current working directory.
()=(`@=()`)

```

Nella missione 22 invece ci viene richiesto di trovare una moneta d'argento e di spostarla nella “**Chest**” usando solo ed esclusivamente la “**shell**”.

```
~/Garden/Maze
[mission 22] $ tree f5e916a29db78cae22231df5a6/ ~/Forest/Hut/Chest/
f5e916a29db78cae22231df5a6/
├── 7e8cc502cddc271d42bed524
│   ├── 3fd25ba00da210cafe7
│   ├── 4d745d37d7936
│   └── b803a1c1601bb5d3fceff7722ac10
├── 81f5f2adc62f21f326892a
│   ├── 0ea968884
│   ├── 7b6cd4c35f612da83a708b078ef1
│   └── f3ab18f25eda8b4be8b9f796a
└── 8f3387dab6e086b90c
    ├── 194824f6da2a2a7fa36db
    ├── 92e553a40a0c1e1f280833a0167ee9
    └── e68b4ae1db9ada
        └── 00000_silver_coin_00000
```

Questo è possibile tramite il comando “**tree**” che ci mostra il contenuto di tutte le liste.

Congratulations, mission 22 has been successfully completed!

Una volta trovata la lista giusta basta spostarla nella “**chest**”.

## Missione n24

```
[mission 24] $ gsh goal
()=( . . . ) @=()
| Mission goal
| A forgetful old hermit called Servillus has set up camp in a cave with his old, leather-bound potion book.
| Go to the cave and help him remember the recipe of his famous herbal tea.
| In order to validate the mission, you need to be in the cave with Servillus **and** your last command prior to ``gsh check`` must show the recipe (including its title), but nothing else.
| Note: you shouldn't alter the content of the book of potions.
|
| Useful commands
| _____
| 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.
()=( . . . ) @=()
```

la missione numero 24 ci chiede di trovare la ricetta delle erbe scritto nel suo libro, per trovarlo ti basta andare nella caverna e inserire il comando:

**cat Book\_of\_potion/table\_of\_contents**

```
~/Mountain/Cave  
[mission 24] $ cat 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  
11. Distilled water _____ page 13  
12. King's ale _____ Page 13
```

Da qui puoi vedere che la ricetta del the è a pagina 7, quindi andrai ad inserire il comando:

**cat Book\_of\_potion/page\_07**

dopo aver aperto la ricetta bisognerà copiare solo le prime 6 righe, ed è qui che ti viene in aiuto un nuovo comando ossia “**head**”, questo comando ti permetterà di catturare solo una parte specificata di stringhe come l’esempio in basso.

```
~/Mountain/Cave  
[mission 24] $ head -n 6 Book_of_potions/page_07  
vvvvvvvvvv  
Herbal tea  
^^^^^^^^^  
1) Boil water.  
2) Add herbs from the forest.  
3) Let it sit for five minutes and drink while ho
```

una volta fatto questo non ti resta che controllare che la missione sia andata a buon fine col comando “[ash check](#)”.

# Missione n25

```
~/Mountain/Cave
[mission 25] $ gsh goal
\_\_/\_\_
|   |
| Mission goal
|   |
| The old man seems to enjoy your company very much. He invites you to stay for supper, and starts preparing a delicious stew for the both of you. While getting the cauldron ready he asks for your help.
| Read him the steps of the recipe from his book.
| In order to validate the mission, you need to be in the cave with Servillus **and** last command prior to "gsh check" must show the steps of the recipe (without its title).
| Note: you shouldn't alter the content of the book of potions.
| Useful commands
| cat FILE
|   Display the contents of the file.
| tail FILE
|   Print the last 10 lines of the file.
| tail -n K FILE
|   Print the last K lines of the file.
\_\_/\_\_
~/Mountain/Cave
```

la missione 25 ti chiederà di rifare in maniera simile l'esercizio numero 24, quindi ti basterà seguire per sommi capi l'esercizio 24.

## Missione n26

```
~/Mountain/Cave
[mission 26] $ gsh goal
\_\_/\_\_
|   |
| Mission goal
|   |
| While cleaning the dishes, Servillus mentions an interesting potion that lets the drinker (temporarily) take the physical appearance of anyone.
| Read the recipe of the potion from the hermit's book.
| In order to validate the mission, you need to be in the cave with Servillus **and** your last command prior to "gsh check" must show the whole recipe (with its title).
| Note: you shouldn't alter the content of the book of potions.
| Useful commands
| cat FILE1 FILE2 ... FILEn
|   Display the contents of the files in order.
| Remark: "cat" is an abbreviation for "concatenate".
\_\_/\_\_
~/Mountain/Cave
```

La missione numero 26 è molto simile agli esercizi 24-25 ma con la differenza del comando “cat” ossia “concatenate”. Quindi la parte differente sarà l'ultima parte dove dovremo andare a concatenare le due pagine come nell'esempio sottostante

```
~/Mountain/Cave  
[mission 26] $ cat Book_of_potions/page_01  
vvvvvvvvvvvvvvvvvvvvv  
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.
```

```
~/Mountain/Cave  
[mission 26] $ cat Book_of_potions/page_02  
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 26] $ cat Book_of_potions/page_01 Book_of_potions/page_02  
vvvvvvvvvvvvvvvvvvvvv  
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 26] $ gsh check  
  
Congratulations, mission 26 has been successfully completed!
```

## Missione n27

```
(—) _____(—)
| / Mission goal
| |
| |
| The old hermit notices your interest for potion recipes, and sees promise in your ability to lookup lists of ingredients. He challenges you to find the steps for the elixir of Youth.
| In order to validate the mission, you need to be in the cave with Servillus **and** your last command prior to ``gsh check`` must show the steps for the recipe and nothing else.
| Note: you shouldn't alter the content of the book of potions.
|
| Useful commands
| _____
| cat FILE1 FILE2 ... FILEn
|   Display the contents of the files in order.
|
| tail
|   Print the last 10 lines sent on the standard input.
|
| tail -n K
|   Print the last K lines sent on the standard input.
|
| COMMAND1 | COMMAND2
|   Run the two commands, feeding the "standard output" of the former into the "standard input" of the latter.
|   Remark: by analogy with plumbing "|" is called "pipe".
|
| Explanations
| _____
|
| Many 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.
| _____(—)
```

**Nella missione 27 ti verrà chiesto di trovare l'elisir della giovinezza e di berla senza toccare i passaggi. In questo caso basterà aggiungere questo comando**

```
cat Book_of_potion/pag_3 Book_of_potion/pag_4 | tail -n 16
```

```
~/Mountain/Cave
[mission 27] $ cat Book_of_potions/page_03 Book_of_potions/page_04 | tail -n 16
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 27] $ gsh check

Congratulations, mission 27 has been successfully completed!
```

**La linea che vedi tra i due comandi serve a specificare che sono due comandi diversi e che vanno eseguiti in maniera separata.**

# Missione n28

```
[mission 28] $ gsh goal

(0)=>ooooooooooooooooooooooooooooooooooooo=(0)
^
 )
  ) Mission goal
  )
  ) The old hermit is thirsty and he would like you lookup the recipe for distilled water.
  ) In order to validate the mission, you need to be in the cave with Servillus **and** your last command prior to ``gsh check`` must show the steps for the recipe and nothing else.
  ) Note: you shouldn't alter the content of the book of potions.
  )
  ) Useful commands
  )
  )
  ) head [-n K] [FILE]
  )   Print the first lines (10 by default, K if ``-n K`` is used) of the given file, or standard input if no file is given.
  )
  ) tail [-n K] [FILE]
  )   Print the last lines (10 by default, K if ``-n K`` is used) of the given file, or standard input if no file is given.
  )
  ) COMMAND1 | COMMAND2
  )   Run the two commands, feeding the "standard output" of the former into the "standard input" of the latter.
  )   Remark: by analogy with plumbing "||" is called "pipe".
  )
  )
  ) Remark
  )
  )
  ) Parts in [square brackets] in command descriptions are stand for optional parts. The brackets are not part of the command.
  )
  )
(0)==>ooooooooooooooooooooooooooooooooooooo=(0)
^
\
```

**La missione richiede cose diverse ma la soluzione è molto simile  
alla precedente**

```
~/Mountain/Cave
[mission 28] $ cat Book_of_potions/page_13
vvvvvvvvvvvvvvv
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).
vvvvvvvvvvv
King's ale
^^^^^^^^^

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

~/Mountain/Cave
[mission 28] $ head -n 6 Book_of_potions/page_13
vvvvvvvvvvvvvvv
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).

client_back...          #1
gameshell-...
#1

~/Mountain/Cave
[mission 28] $ head -n 6 Book_of_potions/page_13 | tail -n3
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 28] $ gsh check

Congratulations, mission 28 has been successfully completed
```

## Missoine n29

```
(—^—)—————(—^—)
| / Mission goal
| / =====
| /
| / A mischievous imp cast a spell that puts smudges of coal everywhere in the castle.
| / Find this spell and remove it.
| /
| / Remark
| / _____
| /
| / The spell is a process.
| /
| / Useful commands
| / _____
| /
| / ps
| / List the processes that are currently executed by the shell.
| /
| / kill N
| / Send the termination signal to process number N.
| / Remark: N is called PID, or "process identifier".
| /
| / clear
| / Clear the screen.
| / The keybinding "Control-L" does the same and is often quicker to use in the terminal.
| / _____
(—^—)—————(—^—)
```

La missione 29 mostra uno svolgimento differente perchè ti chiede di rimuovere una magia, inserendo il comando “**ps**” che ti mostrerà tutti i processi attivi sulla shell. Una volta scritto e inviato il comando ti ritroverai questa schermata

ps				
PID	TTY	TIME	CMD	
1478	pts/0	00:00:00	zsh	
62161	pts/0	00:00:00	bash	
62218	pts/0	00:00:00	bash	
62577	pts/0	00:00:00	spell	
63215	pts/0	00:00:00	ps	

Come puoi ben vedere tra i processi attivi c'è un processo che si chiama **spell**, ora non ti resta che chiuderlo tramite il comando “**kill**” .

Il comando è: “**kill 62577**” il numero è il PID ossia l'identificativo del processo

```
~ [mission 29] $ kill
    *#@*
    @_**/~
    !$-#
62577
[1]+  Terminated                  "$GSH_TMP/$(gettext "spell"))"
~ [mission 29] $ gsh check
Congratulations, mission 29 has been successfully completed!
```

# Missioni n30

```
[mission 30] $ gsh goal

/b/\_..  
( \_/\_|| Mission goal  
||  
|| The mischievous imp has more than one trick up his sleeve. He managed to protect his spell against most tampering.  
You need to find this spell and try to remove it with standard signal. If it doesn't work, use a more brutal signal.  
  
|| Remark  
||  
|| The spell is a process.  
  
|| Useful commands  
||  
|| ps  
List the processes that are currently executed by the shell.  
  
|| kill [OPTIONS] N  
Send the termination signal to process number N.  
  
|| Useful options:  
||   -s SIGNAL choose the signal name  
||   -NUMBER      choose the signal number  
||   -l           list available signals  
  
|| clear  
Clear the screen.  
The keybinding "Control-L" does the same and is often quicker to use in the terminal.  
  
|| Details  
||  
|| By default ``kill`` sends the "TERM" signal to the processes (TERM stands for "termination").  
Processes may ignore some signals, but the "KILL" signal cannot be ignored!  
||
```

Nella missione numero 30 viene richiesta la stessa cosa della missione 29, la differenza è che ora il solo “**kill**” non avrà alcun effetto per questo bisogna mettere l’opzione “**-s**” che come spiegato anche all’interno dell’immagine sta per scegli il nome del segnale, in questo caso il codice sarà:

**kill -s KILL N(numero dei PID)**

## Missione n31

```
[mission 31] $ gsh goal

Mission goal
The imp is comparing his magic with a fairy. They met in the cellar, and imp is conjuring lumps of coal while the fairy is conjuring delicate snowflakes.
Remove the imp's spells and the coal that litters the cellar, but don't touch the snowflakes!

Remark
Do not kill the imp or the fairy.

Useful commands
pstree PID
Print the list of processes with their parent / child relationship.
If no PID is given, show the list of all processes with their parent / child relationship.

Useful options:
-p    show the PID of processes
$$    This variable contains the PID of the
shell and can be given as the PID.

kill N
Send the termination signal to process number N.
Remark: N is called PID, or "process identifier".
```

.

La missione numero 31 ti dice di togliere tutto il carbone e le maledizioni. Per fare ciò devi andare nelle celle e col comando “ls” vedere cosa c’è al suo interno. Una volta visto il contenuto della cella, andiamo a vedere tutti i processi in esecuzione col comando “ps” una volta avviato il comando vedrai che ci sono diversi programmi in esecuzione, ma come fare a capire quali togliere e quali no ?

Semplice col comando “**pstree -p (col PID)**” vedrai tutti gli altri PID collegati ad esso, in questo caso vedrai che il PID della maledizione è collegata ad altre magie, quindi non ti resta che rimuovere sempre col comando “kill” le varie maledizioni. Una volta tolte non ti resta che togliere tutto il carbone col comando “rm \*coal\*” e la missione è completata.

```
~/Castle/Cellar
[mission 31] $ pstree -p 175666
mischievous_imp(175666)─spell(175683)─sleep(235622)
                           └─spell(175684)─sleep(235464)
                           └─spell(175685)─sleep(235544)
                               └─tail(175686)

~/Castle/Cellar
[mission 31] $ kill 175683 175684 175685
gasheshell-...
~/Castle/Cellar
[mission 31] $ ps
   PID TTY          TIME CMD
 95236 pts/1    00:00:00 zsh
 95274 pts/1    00:00:00 bash
 95361 pts/1    00:00:00 bash
175664 pts/1    00:00:00 nice_fairy
175666 pts/1    00:00:00 mischievous_imp
175674 pts/1    00:00:00 spell
175675 pts/1    00:00:00 spell
175677 pts/1    00:00:00 spell
175678 pts/1    00:00:00 tail
175686 pts/1    00:00:00 tail
237813 pts/1    00:00:00 sleep
237857 pts/1    00:00:00 sleep
237901 pts/1    00:00:00 sleep
237902 pts/1    00:00:00 ps

~/Castle/Cellar
[mission 31] $ rm *coal*
~/Castle/Cellar
[mission 31] $ gsh check

Congratulations, mission 31 has been successfully completed!
```

# Missione n32

```
[mission 32] $ gsh goal

Backdoor.py
()=(('
,
| Mission goal
| _____
client backdoor
| 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.
()
) meshell.sh
()=(('
,
|
```

Semplice e intuitivo molto poco da spiegare

```
~ gameshell.sh
[mission 32] $ gsh check
28 + 86 = ?? 114
30 + 15 = ?? 45
20 + 97 = ?? 117
10 + 6 = ?? 16
37 + 52 = ?? 89
•
Congratulations, mission 32 has been successfully completed!
```

# Mission 33

```
[mission 33] $ gsh goal

Backdoor mode
()=(_____
| Mission goal
| _____
client To get better in the magical art, one needs to know mental math.
Get ready, because Merlin is about to test your speed with products.
Run the command ``gsh check`` to start.

game Remark
_____
There now is a time constraint.

Hint
_____
The library is rumored to contain some mathematics books and hidden volumes.

Useful commands
_____
COMMAND < FILE
Replace the command's standard input by a file.
Instead of reading lines from the keyboard device, the command will read lines from the file.
()=(_____
| _____
| @=()
```

La missione 33 sembra uguale alla precedente ma quando andrai ad avviare la sfida ti risulterà impossibile, perché bisogna andare nella libreria e prendere il file “**Mathematic\_101**”

```
~ [mission 33] $ cd Backdoor.py
~ [mission 33] $ ls
castle/ Castle/ Forest/ Garden/ Mountain/ Stall/
~
~ [mission 33] $ cd Castle/
client_back... gameshell...
~/Castle [mission 33] $ ls
Cellar/ Great_hall/ Main_building/ Main_tower/ Observatory/
~/Castle [mission 33] $ cd Main_building/
gameshell.sh
~/Castle/Main_building [mission 33] $ ls
Library/ Throne_room/
~/Castle/Main_building [mission 33] $ cd Library/
~/Castle/Main_building/Library [mission 33] $ ls
Greek_Latin_and_other_modern_languages Mathematics_101 Merlin_s_office/ MMathematics_101
~/Castle/Main_building/Library [mission 33] $ cat Mathematics_101
```

Dopo aver fatto tutti i procedimenti chiudere l'esercizio col comando:

**gsh check < Mathematic\_101**

## Missoine n34

```

~/Castle/Main_building/Library
[mission 34] $ gsh goal

Mission goal
_____
Merlin's old spell books are kept in his office, in the library. You need to save a list of all those spell books (and nothing else) in a file called "inventory.txt", in the drawer...
_____
Useful commands
_____
COMMAND > FILE
Send the command's output to a file instead of printing it on the screen.

less FILE
display the content of a file, one page at a time

Important keybindings are
q      quit
Space   scroll down one page
/ STRING search for a string
n      go to the next occurrence of the
      search string

ls FILE1 ... FILEn
Show the list of files given as arguments.
This is particularly useful if you use shell patterns with wildcards.

[...]

```

L'esercizio ti chiede di trasportare ciò che è scritto nei grimori e trasportarlo in inventory.txt

```

~/Castle/Main_building/Library/Merlin_s_office
[mission 34] $ ls
candle      grimoire_1038  grimoire_1422  grimoire_1600  grimoire_202  grimoire_2057  grimoire_20917  grimoire_27740  grimoire_3137  grimoire_4093  grimoire_5047  grimoire_764
draw/       grimoire_12534  grimoire_14716  grimoire_16272  grimoire_20870  grimoire_23042  grimoire_26211  grimoire_28043  grimoire_29949  grimoire_31087  grimoire_4994  grimoire_5438  grimoire_7895
grimoire_10153  grimoire_17694  grimoire_14649  grimoire_16756  grimoire_2094  grimoire_23614  grimoire_26422  grimoire_28166  grimoire_32927  grimoire_32945  grimoire_5040  grimoire_65  grimoire_8295
grimoire_10482  grimoire_12728  grimoire_15222  grimoire_17977  grimoire_21025  grimoire_24056  grimoire_26667  grimoire_28417  grimoire_29329  grimoire_3284  grimoire_5276  grimoire_6514  grimoire_8316
grimoire_10602  grimoire_12841  grimoire_15359  grimoire_18333  grimoire_21326  grimoire_24130  grimoire_27756  grimoire_28506  grimoire_30230  grimoire_3241  grimoire_5337  grimoire_6588  grimoire_8989
grimoire_10897  grimoire_12872  grimoire_1544  grimoire_18390  grimoire_21430  grimoire_24312  grimoire_2777  grimoire_28065  grimoire_30882  grimoire_32214  grimoire_5800  grimoire_6892
grimoire_10959  grimoire_12878  grimoire_1547  grimoire_18460  grimoire_21508  grimoire_25983  grimoire_27742  grimoire_28932  grimoire_31591  grimoire_32714  grimoire_4958  grimoire_6899
grimoire_11451  grimoire_15943  grimoire_1594  grimoire_18707  grimoire_22401  grimoire_25901  grimoire_27704  grimoire_28927  grimoire_31017  grimoire_3891  grimoire_5920  grimoire_7173

~/Castle/Main_building/Library/Merlin_s_office
[mission 34] $ ls *grimoires > Drawer/inventory.txt
~/Castle/Main_building/Library/Merlin_s_office
[mission 34] $ gsh check
Congratulations, Mission 34 has been successfully completed!

```

## Missoine n35

```

Mission goal
_____
Merlin's old alchemy books are kept in his office, in the library. You need to output a list of all the books containing the alchemical compound 'gsh' (for "Glutathione"). Beware, it can be spelled with a mix of letters in uppercase and lowercase.

Some of those books are locked, and you are not allowed to consult them. Ignore them.

Remark
_____
Your last command should display the list of books mentioning 'gsh', and nothing else. In particular, you should not show the chemical compounds themselves and no error message should appear.

Useful commands
_____
grep STRING FILE1 ... FILEn
Search for a string inside a file and print the corresponding lines.
Some interesting options are
-l : do not print the lines, but only the filenames containing
the string
-i : do not differentiate between uppercase and lowercase

COMMAND > FILE
Send messages (stdout) to the file.
(The file is overwritten.)

COMMAND 2> FILE
Send error messages (stderr) to the file.
(The file is overwritten.)

/dev/null
"Virtual" file that is universally empty: anything sent to it disappears.

Explanations
_____
Every command can output messages to the screen in two ways:
- standard printing ("stdout")
- error printing ("stderr")
By default, both kind of messages are shown on the screen.

It is however possible to redirect both of them to files independently.

```

```

~/Castle/Main_building/Library/Merlin_s_office
[mission 35] $ grep -l -i gsh *grimoire_* 2> /dev/null
grimoire_ADEcDmOsYDsRNsrlvBobZikrnMQYW
grimoire_AzWtRgUD
grimoire_clppmpMsVTkbhvA
grimoire_dgTKqKbdNGbX
grimoire_FIRmmRZVhhODlulaefJueXDrSjjrPPX
grimoire_hUtCaATZBI
grimoire_HXfvaHShHAFKmZJjj
grimoire_iJSQjtaT
grimoire_JGDUXIMyWadHKDeXLQthGIaSSa
grimoire_kyQQvsUurdbAyhQGoeI
grimoire_NQEgKvsmsTZB
grimoire_nweTsviObtaBUdm
grimoire_pkdzMcUAq
grimoire_QRjxkTwxZAFJVUTwraL
grimoire_ReDjVKYRFNUrfafHvRLvGdz
grimoire_rFrkORCRNQernSmBe
grimoire_RkLvCuERjwxkyHoWeAayWCgy
grimoire_SVnpzcGWtHYxCRBGSjs
grimoire_syjUpNiVcfokebhNoLCx
grimoire_ttxJxOjEXLbTz
grimoire_TZNDLJbqINbxDr
grimoire_ULWxjbHGYNmJunMDdY
grimoire_wCkaazbaeNjSySjJkMOZbTQMXfTWr
grimoire_wlqkwbuhhYDWYv
grimoire_wnfJiaEBtxVsVtzidjxEoYnxO
grimoire_xptpgSDtUgDrLQvw

~/Castle/Main_building/Library/Merlin_s_office
[mission 35] $ gsh check

Congratulations, mission 35 has been successfully completed!

```

## Mission n36

```

[mission 36] $ gsh goal
^
(____)-
| / | Mission goal
| / |
| / |
| / | Merlin has turned crazy... He paces around the observatory tower and mumbles incoherently.
| / |
| / | You need to filter out his ramblings to discover the secret key he is the only one to know.
| / |
| / | Hint
| / |
| / | It is likely that Merlin's message is riddled with errors.
| / | To complete this mission, you have to give the secret key **using a file redirection**.
| / |
| / | Useful commands
| / |
| / | ./FILE
| / |   Run an executable file as a program. Needless to say that Merlin is executable...
| / |
| / | COMMAND > FILE
| / |   Send standard output (stdout) for the command to a file.
| / |   (The file is overwritten.)
| / |
| / | COMMAND 2> FILE
| / |   Send error output (stderr) for the command to a file.
| / |   (The file is overwritten.)
| / |
| / | COMMAND < FILE
| / |   Send the file to the standard input (stdin) of the command.
(____)-

```

```
[mission 36] $ cd Castle/
~/Castle
[mission 36] $ cd Observatory/
~/Castle/Observatory
[mission 36] $ ls
merlin star_chart
~/Castle/Observatory
[mission 36] $ ./merlin
jSYwVgRwnTOprhuGftkVrROVTRf1QclYroBPkPYD1NDwiOfuASpheOYdiZeqEQvdtMxBTaQQakNUBuLMuLzTaEsvnduJGjxXaeAMFnosZGKfmnIYMRsjkQkhhhxqaoZvPzfIEKdhMjtkCf5tCsvqoSrmjDsudfawyKjbxNLQemMktBdzQccrGwOYgmHocQGyUdyjVwGy

~/Castle/Observatory
[mission 36] $ ./merlin 2> error.txt
THESECRETKEYISONSTDERR
~/Castle/Observatory
[mission 36] $ ./merlin > output.txt
jSYwVgRwnTOprhuGftkVrROVTRf1QclYroBPkPYD1NDwiOfuASpheOYdiZeqEQvdtMxBTaQQakNUBuLMuLzTaEsvnduJGjxXaeAMFnosZGKfmnIYMRsjkQkhhhxqaoZvPzfIEKdhMjtkCf5tCsvqoSrmjDsudfawyKjbxNLQemMktBdzQccrGwOYgmHocQGyUdyjVwGy

~/Castle/Observatory
[mission 36] $ cat error.txt
THESECRETKEYISONSTDERR
~/Castle/Observatory
[mission 36] $ cat output.txt
jSYwVgRwnTOprhuGftkVrROVTRf1QclYroBPkPYD1NDwiOfuASpheOYdiZeqEQvdtMxBTaQQakNUBuLMuLzTaEsvnduJGjxXaeAMFnosZGKfmnIYMRsjkQkhhhxqaoZvPzfIEKdhMjtkCf5tCsvqoSrmjDsudfawyKjbxNLQemMktBdzQccrGwOYgmHocQGyUdyjVwGy

~/Castle/Observatory
[mission 36] $ gsh check < error.txt
What is the secret key?
Congratulations, mission 36 has been successfully completed!
```

## Mission n37

```
~/Castle/Observatory
[mission 37] $ gsh goal

File System
| Mission goal
| =====
| The door to the King's quarter is in the throne room.
| Go to the King's quarter.

| Remark
| -----
| Access to this part of the castle is probably restricted.

| Useful commands
| -----
| ls -l
| List the files with their important meta-data.

| chmod [OPTIONS] FILE
| Modify the permissions for the file (or directory).

| Refer to the manual to discover which options are available.
```

```
~/Castle/Main_building/Throne_room
[mission 37] $ ls
Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 37] $ cd Kings_quarter/
bash: cd: Kings_quarter/: Permission denied

~/Castle/Main_building/Throne_room
[mission 37] $ la
Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 37] $ ls -l
total 4
drw-rw-r-- 2 kali kali 4096 Apr 19 14:38 Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 37] $ chmod
chmod: missing operand
Try 'chmod --help' for more information. gameshell-...

~/Castle/Main_building/Throne_room
[mission 37] $ chmod Kings_quarter/
chmod: missing operand after 'Kings_quarter/'
Try 'chmod --help' for more information.

~/Castle/Main_building/Throne_room
[mission 37] $ chmod +x Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 37] $ ls -l
total 4
drwxrwxr-x 2 kali kali 4096 Apr 19 14:38 Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 37] $ cd Kings_quarter

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 37] $ ls
Kings_quarter

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 37] $ gsh check

Congratulations, mission 37 has been successfully completed
```

# Missione n38

```
~/Castle/Main_building/Library
[mission 38] $ gsh goal

/ \ \_ .. _____
( \_ \_ \_ || Mission goal
\ \_ \_ \_ ||

The King is rumored to keep the combination to his safe written on a note in his room
Find that combination.

Remark
_____
The King probably tried to make this note unreadable!

Useful commands
_____
ls -l
Lists the files with their important meta-data.

Access permissions are listed first on each line.

chmod [OPTIONS] FILE
Modifies the permissions for the file (or directory).

Refer to the manual to discover which options are available.

/ \ \_ .. _____
( \_ \_ \_ ||
```

```
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ gsh check < .secret_note
What's the combination to open the King's safe?
Congratulations, mission 38 has been successfully completed!
```

## Mission n39

```
~/Castle/Main_building/Lobby/
[mission 39] $ gsh goal

Backdoor.py

Mission goal
The safe in the throne room contains the king's crown.
Steal it and store it in your chest.

Also, the base of the crown is inscribed with a magical sequence of digits. Look at those digits and remember them.

gamebelt.sh
Useful commands

ls -l
List the files with their important meta-data.
Access permissions are listed first on each line.

chmod [OPTIONS] FILE
Modify the permissions for the file (or directory).

Refer to the manual to discover which options are available.
```

```
~/Castle/Main_building/Throne_room
[mission 39] $ cd Safe/

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ ls -l
total 4
 1 kali kali 48 Apr 22 06:35 crown

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ chmod +r crown

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ chmod +x crown

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ cat crown
jgs
(^.^.^)
\@*\@*/_
{_108_}

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ mv crown ~/Forest/Hut/Chest/
mv: cannot move 'crown' to '/home/kali/gameshell.3/World/Forest/Hut/Chest/crown': Permission denied

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ cd ..
~/Castle/Main_building/Throne_room
[mission 39] $ ls
Kings_quarter/  Safe/

~/Castle/Main_building/Throne_room
[mission 39] $ chmod +w Safe/

~/Castle/Main_building/Throne_room
[mission 39] $ ls -l
total 8
drwxrwxr-x 2 kali kali 4096 Apr 22 06:28 Kings_quarter/
drwxrwxr-x 2 kali kali 4096 Apr 22 06:35 Safe/

~/Castle/Main_building/Throne_room
[mission 39] $ cd Safe/
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ mv crown ~/Forest/Hut/Chest/
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ gsh check
What are the 3 digits inscribed on the base of the crown? 108

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

## Mission n40

```

~/Castle/Maze/building/library
[mission 40] $ gsh goal

()=(
    Mission goal
    Look for the ruby in the maze in the garden, and move it to your chest.

    Hint
    The filename does not contain the string "ruby". Since there aren't many files in the maze, a possible strategy is to look for all **file** (as opposed to directories), and check the string "ruby".

    Useful commands
    Find
        Search files / directories from the current working directory.
        Conditions may be added about names, size, modification date, etc.
        An interesting condition is:
            -type TYPE
    cat FILE
        Output the content of the file on the screen.
    man COMMAND
        Display the manual of the command.
        Important key bindings:
            q      quit
            Space   scroll down one page
            / STRING search for the string
            n      find the next occurrence of the
                  search string
    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 ``-type`` in the manual.)
)@=()

```

```

~/Garden/Maze
[mission 40] $ find . -type f
./5b34ca2005/111af66e989fcc854/e133520bca73a43d58cf2dd806a1c/1749
./5b34ca2005/d355044d0ba1/20f94d5beee7ba0/44495
./d378f118ec49737a86/cfc4bf0bbb96c6bf6e928f22/b09822545e1eca1c7/50270
./d378f118ec49737a86/51a99664f471550ee/b120fd78ffc87b16b6eb2de/61574
./a94511d63171193ad33/17e93594f6653851cf2ef959/e6f01e6c7cea9/58081
./a94511d63171193ad33/a58f75a47ff1797454b89ce87/50ef7931bafd379d00730365cc893e7/21562

~/Garden/Maze
[mission 40] $ cat ./5b34ca2005/1
111af66e989fcc854/ 16fae2a4d/

~/Garden/Maze
[mission 40] $ cat ./5b34ca2005/111af66e989fcc854/e
e133520bca73a43d58cf2dd806a1c/ e800ab5016c861ad27a6ea5b/ eafcb92b5ca076ca87d8770fb/

~/Garden/Maze
[mission 40] $ cat ./5b34ca2005/111af66e989fcc854/e133520bca73a43d58cf2dd806a1c/1749
1749 stone b2a045bb611ab2566a3ad9326367dd00ee1170bb

~/Garden/Maze
[mission 40] $ cat ./5b34ca2005/d355044d0ba1/20f94d5beee7ba0/44495
44495 stone 4d72e4e210444c15ee4366fc7c414eddb7109202
client_back... gamesnet-...

~/Garden/Maze
[mission 40] $ cat ./d378f118ec49737a86/cfc4bf0bbb96c6bf6e928f22/b09822545e1eca1c7/50270
50270 stone 6d51d8c194273b327f14a524edba455fd548ceb6

~/Garden/Maze
[mission 40] $ cat ./d378f118ec49737a86/51a99664f471550ee/b120fd78ffc87b16b6eb2de/61574
61574 ruby 7fbfd81a947992871694bb3c368be426db764780

~/Garden/Maze
[mission 40] $ mv ./d378f118ec49737a86/51a99664f471550ee/b120fd78ffc87b16b6eb2de/61574 ~/Forest/Hut/Chest/

~/Garden/Maze
[mission 40] $ gsh check

Congratulations, mission 40 has been successfully completed!

```

# Missione n41

```
~/Garden/Maze
[mission 41] $ gsh goal

B/ \ copy
|   | Mission goal
\   | _____
|   |
|   | Combine several commands with "!" in order to find the diamond in the maze, and move it to your chest.

client
game
gshell...  
  
Remark
_____  
  
The filename doesn't contain the string "diamond". You need to find a file that contains the string "diamon  
  
Useful commands
_____  
  
find
Search files from the current working directory.
Conditions on the file may be added about filenames, size, modification date, etc.  
  
grep [OPTIONS] STRING FILE1 ... FILEN
Search for a string inside the files.  
  
Useful option:
-l only print the names of files containing the string.  
  
xargs COMMAND
read lines from stdin and run the command
`_COMMAND LINE1 LINE2 ... LINEN
`xargs` is particularly useful after a ``|`` redirection.
```

```
~/Garden/Maze  
[mission 41] $ find . -type f
```

```
~/Garden/Maze
[mission 41] $ find . -type f | xargs grep -i diamond
./ba49d7acc806b07bb947/895bab0a6c18149/c3eb7aa17:c3eb7aa17 diamond f83106ec231e61fd1f2a38986328c80ff92ffd85

~/Garden/Maze
[mission 41] $ find . -type f -exec grep -i diamond {} {}
find: missing argument to '-exec'

~/Garden/Maze
[mission 41] $ find . -type f -exec grep -i diamond {} \;
c3eb7aa17 diamond f83106ec231e61fd1f2a38986328c80ff92ffd85

~/Garden/Maze
[mission 41] $ mv ./ba49d7acc806b07bb947/895bab0a6c18149/c3eb7aa17 ~/Forest/Hut/Chest/

~/Garden/Maze
[mission 41] $ gsh check

Congratulations, mission 41 has been successfully completed!
Client Pack... gamestied...
```

# Missione n42

```
/Garden/Maze [mission 42] $ gsh goal

[\u25b6] Mission goal

Next to the castle, there is a merchant stall. People often buy on credit and reimburse their debt when they can. The shopkeeper keeps books on everyone's debt on a scroll. Whenever someone pays his debt, he inscribes "PAID" next to the corresponding transaction. Combine several commands with ``||`` in order to find the King's debt.

[\u25b6] Remark

You are only allowed 3 commands to find the King's debt. You can always reset the counter with `gsh reset`, but the whole stall and the debts of everyone will be re-generated as well.

[\u25b6] Hint

When there are no sub-directories, an alternative to `find . -name '*boring_object*'` is to use `ls` and filter the result with grep:  
$ ls | grep "boring_object"

[\u25b6] Useful commands

grep [OPTIONS] STRING FILE1 ... FILEn  
Filter the files lines, keeping only those that contain the given string.  
If no file is given, grep uses stdin.  
  
Useful option  
-v : only show the lines that **do not contain** the string.
```

## Mission n43

```
client_back... gameshell...
(0)
~/Stall
[mission 42] $ grep King *_s_c_r_o_l_l_* | grep -v PAID
the King bought a piece of soap for 6 coppers.
the King bought a bottle of cider for 5 coppers.
the King bought an opal for 6 coppers.
the King bought a wooden spoon for 5 coppers.
the King bought a spade for 5 coppers.
the King bought a chicken for 5 coppers.
(1)
~/Stall
[mission 42] $ gsh check
How much does the king owe? 32

Congratulations, mission 42 has been successfully completed!
```

```
[mission 43] $ gsh goal
Backdoor.py
()=()
Mission goal
=====
client: Combine several commands with `|` in order to find the number of unpaid items.
game: Remark
You are only allowed a single command.
You can always reset the counter with `gsh reset`, but the whole stall will be re-generated.

Useful commands
=====
grep [OPTIONS] STRING FILE1 ...
Filter the files lines, keeping only those that contain the given string.
If no file is given, the command uses stdin.

wc FILE
Count the number of lines / words / characters in a file
If no file is given, `wc` counts lines / words / characters on stdin.
()=()
```

```
~/Stall
[mission 43] $ grep -v PAID *_s_c_r_o_l_l_* | wc -l
72
(1)
~/Stall
[mission 43] $ gsh check
How many unpaid items are there? 72

Congratulations, mission 43 has been successfully completed!
```

## Mission n44

```
~/Stall
[mission 44] $ gsh goal
()=()
Mission goal
=====
client: py
A secret message has been found, it is kept in the drawer in Merlin's office. It was probably enciphered using a Caesar shift cipher.
Decrypt it by making an exhaustive search from the command line.

Hint
=====
client_hints... gameshell...
All other secret messages that have been found were using a shift between 10 and 16.

Useful commands
=====
game: tr STRING1 STRING2
Replace each character STRING1[i] by STRING2[i] on the standard input, and output the result.
Remark: `tr` is an abbreviation for "translate".
Example: if
        STRING1 = "abcdef"
        STRING2 = "klmnop"
the file will be output with the following substitution (other characters are left unchanged)
        a → k b → l c → m
        d → n e → o f → p
Note: instead of "abcdefghijklm", it is possible to write "a-g".
This command is particularly useful with a redirection "<".
```

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 44] $ cat secret_message | tr "a-z" "m-zA-l"  
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: sryi  
merlin the enchanter
```

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer  
[mission 44] $ gsh check  
What's the key that will make Merlin's chest to appear?  
sryi
```

Congratulations, mission 44 has been successfully completed!

[ progress was saved in /home/kali/gameshell-save.sh ]

CONGRATULATIONS!

You have finished all the missions.

Le ultime missioni sono state un ripetersi di comandi già fatti in precedenza quindi ho preferito dare gli screen di ciò che andava fatto e le rispettive soluzioni.