



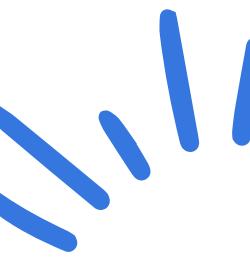
GAMESHELL

# DUNGEONSHELL

BY

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# ***Introduzione***

Questo giochino, ci mette nei panni di un valoroso utente, che vuole imparare tutti i comandi della shell di Linux.

Impareremo il tutto, in un'avventura RPG retrò.

Nella prima missione bisogna raggiungere la cima della torre principale.

Ho utilizzato il comando cd per spostarmi da una stanza all'altra.

pwd per conoscere la mia posizione corrente. ls per avere una lista delle cartelle e file, dove

il nome della cartella indica il luogo che mi farà raggiungere

I comandi principali sono gsh goal, per visualizzare l'obiettivo della missione, gsh check per controllarne lo stato

```
daniele@kali: ~
File Actions Edit View Help
[mission 1] $ gsh goal
/G\_\_.._
(\_\_.._
\_\_.._
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.
gsh reset
Restart the mission from the beginning.

Remarks
_____
UPPERCASE words appearing in commands are meta-variables: you need to replace them by appropriate (string) values.
Most filesystems treat uppercase and lowercase characters differently. Make sure you use the correct path.
/G\_\_.._
(\_\_.._
\_\_.._
[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] $ ls
[mission 1] $ gsh check
Congratulations, mission 1 has been successfully completed!
+-----+
| Use the command
| $ gsh help
| to get the list of "gsh" commands.
+-----+
```

```
daniele@kali:~  
File Actions Edit View Help  
[mission 2] $ gsh goal  
  
Mission goal  
=====  
Go the castle's cellar.  
  
Secondary objective  
=====  
Understand the difference between ``cd -`` and ``cd ..``.  
  
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.  
  
[mission 2] $ ls  
[mission 2] $ cd ..  
[mission 2] $ ls  
Top_of_the_tower  
[mission 2] $ cd ..  
[mission 2] $ ls  
Second_floor  
[mission 2] $ cd ..  
[mission 2] $ cd ..  
[mission 2] $ ls  
Cellar Great_hall Main_building Main_tower Observatory  
[mission 2] $ cd Cellar  
[mission 2] $ ls  
barrel_of_apples  
[mission 2] $ gsh check  
  
Congratulations, mission 2 has been successfully completed!
```



Mission goal

Build a "Hut" in the forest, and then build a "Chest" in the hut.

Useful commands

`mkdir DIRECTORY`

Create a new directory inside the current directory.

Remark: ```mkdir`'' is an abbreviation for "make directory".

```
~/Castle/Main_building/Throne_room
```

```
[mission 4] $ ls
```

```
Kings_quarter
```

```
~/Castle/Main_building/Throne_room
```

```
[mission 4] $ cd
```

```
~
```

```
[mission 4] $ ls
```

```
Castle Forest Garden Mountain Stall
```

```
~
```

```
[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!
```

## Mission goal

## Useful commands

```
rm FILE1 FILE2 ... FILEn  
Delete the files (permanently).  
Remark: ``rm`` is an abbreviation for "remove".
```

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

```
mission 5] $ ls  
castle Forest Garden Mountain Stall
```

```
[mission 5] $ cd Castle
```

```
/Castle  
mission 5] $ ls  
cellar  Great_hall  Main_building  Main_tower  Observatory
```

```
/Castle  
mission_5] $ cd Cellar
```

```
/Castle/Cellar  
mission 5] $ ls  
arrel_of_apples bat_1 bat_2 spider_1 spider_2 spider_3
```

```
/Castle/Cellar  
mission 5] $ rm spider_1 spider_2 spider_3
```

```
/Castle/Cellar  
mission 5] $ ls  
barrel_of_apples bat_1 bat_2
```

```
/Castle/Cellar  
mission 5] $ gsh check
```

daniele@kali: ~

```
File Actions Edit View Help
~/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
| |
| | _____
| | 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.
| |
/ \ \_ .. _____
( \_ / \_ |
```

~/Castle/Cellar
[mission 6] \$ ls
barrel\_of\_apples bat\_1 bat\_2

~/Castle/Cellar
[mission 6] \$ cd

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

~ [mission 6] \$ cd Garden

~/Garden
[mission 6] \$ ls
Flower\_garden Maze Shed coin\_1 coin\_2 coin\_3

~/Garden
[mission 6] \$ mv coin\_1 coin\_2 coin\_3 /Forest/Hut/Chest
mv: target '/Forest/Hut/Chest': No such file or directory

~/Garden
[mission 6] \$ mv coin\_1 coin\_2 coin\_3 ~/Forest/Hut/Chest

~/Garden
[mission 6] \$ cd ~/Forest/Hut/Chest

~/Forest/Hut/Chest
[mission 6] \$ ls
coin\_1 coin\_2 coin\_3

~/Forest/Hut/Chest
[mission 6] \$ gsh check

Congratulations, mission 6 has been successfully completed!

```
daniele@kali: ~
File Actions Edit View Help
~/Forest/Hut/Chest
[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

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 star
Tab
The tabulation key "completes" the name of a file or directory once you have typed the beginning of its nam
if there is only one possible completion.
Tab-Tab
Pressing tabulation twice successively shows a list of possible completions.

~/Forest/Hut/Chest
[mission 7] $
Display all 3934 possibilities? (y or n)
~/Forest/Hut/Chest
[mission 7] $
~/Forest/Hut/Chest
[mission 7] $ cd ~/Garden

~/Garden
[mission 7] $ ls -A
.11027_coin_1 .38662_coin_2 .53016_coin_3 Flower_garden Maze Shed
~/Garden
[mission 7] $ ls
Flower_garden Maze Shed
~/Garden
[mission 7] $ mv .11027_coin_1 .38662_coin_2 .53016_coin_3 Flower_garden/ Maze/      Shed/
~/Garden
[mission 7] $ mv .11027_coin_1 .38662_coin_2 .53016_coin_3 Flower_garden/ Maze/      Shed/
~/Garden
[mission 7] $ mv .11027_coin_1 .38662_coin_2 ~/Forest/Hut/Chest
~/Garden
[mission 7] $ gsh check
The coin 'coin_3...' is still in the garden!
```

```
~/Garden
[mission 7] $ gsh check
The coin 'coin_3...' is still in the garden!
Sorry, mission 7 hasn't been completed.

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

~/Garden
[mission 7] $ ls -A
.14130_coin_1 .31408_coin_3 .36274_coin_2 Flower_garden Maze Shed
~/Garden
[mission 7] $ mv .14130_coin_1 .31408_coin_3 .36274_coin_2 ~/Chest
mv: target '/home/daniele/gameshell/World/Chest': No such file or directory
~/Garden
[mission 7] $ mv .14130_coin_1 .31408_coin_3 .36274_coin_2 ~/Forest/Hut/Chest
~/Garden
[mission 7] $ ls -a
. .. Flower_garden Maze Shed
~/Garden
[mission 7] $ gsh check
Congratulations, mission 7 has been successfully completed!
```

Scrivendo una parte del nome di un file, ed utilizzando il tasto 'tab', ci permette di completare il nome del file, senza doverlo scrivere manualmente per in

La missione 8 richiede di eliminare tutti i ragni. Come possiamo vedere dal comando ls, i ragni sono tanti e scrivere il nome di ognuno di loro richiede troppo tempo. Pertanto utilizziamo il comando rm e inseriamo gli \* nella parte del nome del file che può avere qualsiasi carattere o spazio, andando a specificare solo `_spider_`, così da eliminare tutti i ragni senza doverli scrivere a mano.

```
daniele@kali: ~
[mission 8] $ gsh goal
/θ\_\_.._
( \_/\_||| 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 director
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
*x → Folder-1 potato
x* → error, no matching file
*-? → file-1 Folder-1
*-?? → file-14

~/\_\_|
( \_/\_||| ~Garden
[mission 8] $ cd ~/Cellar
bash: cd: /home/daniele/gameshell/World/Cellar: No such file or directory
~/Garden
[mission 8] $ cd
~
[mission 8] $ ls
Castle Forest Garden Mountain Stall
~
[mission 8] $ cd Castle
~/Castle
[mission 8] $ ls
Cellar Great_hall Main_building Main_tower Observatory
~/Castle
[mission 8] $ cd Cellar
~/Castle/Cellar
[mission 8] $ ls
10196_bat_4 13921_spider_10 1625_spider_31 20226_spider_41 24168_spider_28 26996_spider_9 29305_spider_26
1060_spider_21 14012_spider_39 16691_spider_1 20850_spider_24 24196_spider_37 27380_spider_48 29580_spider_46
10649_spider_33 1437_spider_25 16855_spider_36 21392_spider_18 24260_spider_47 27874_spider_23 30010_spider_3
10819_spider_43 1480_spider_7 17487_bat_5 224_spider_50 24282_spider_5 28238_spider_11 30544_spider_14
11435_spider_19 1579_spider_30 18716_spider_20 22684_spider_38 25495_spider_40 28389_spider_17 3152_spider_12
12377_spider_29 15847_spider_2 19072_spider_8 23280_spider_4 2631_spider_16 284_bat_1 31660_spider_44
12929_spider_13 16044_spider_35 19095_bat_2 23908_spider_22 26932_spider_27 28670_spider_32 32215_spider_6
~/Castle/Cellar
[mission 8] $ rm ****_spider_**
~/Castle/Cellar
[mission 8] $ ls
10196_bat_4 17487_bat_5 19095_bat_2 284_bat_1 5950_bat_3 barrel_of_apples
~/Castle/Cellar
[mission 8] $ ls -a
. .. 10196_bat_4 17487_bat_5 19095_bat_2 284_bat_1 5950_bat_3 barrel_of_apples
~/Castle/Cellar
[mission 8] $ gsh check
Congratulations, mission 8 has been successfully completed!
```

```
~/Castle/Cellar  
[mission 9] $ gsh goal  
  
'`  
| Mission goal  
| ======  
  
| The spiders are getting clever: they found a way to hide.  
| Get rid of all the spiders that are hiding in the cellar without disturbing 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.  
  
| Remark  
| ======  
  
| The wildcards "*" and "?" don't see hidden files, you need to add an explicit dot at the start of the pattern.  
(`/  
`))
```

```
~/Castle/Cellar  
[mission 9] $ ls  
10196_bat_4 17487_bat_5 19095_bat_2 284_bat_1 5950_bat_3 barrel_of_apples  
  
~/Castle/Cellar  
[mission 9] $ ls -a  
. .12084_spider_15 .16871_spider_30 .18921_spider_28 .21447_bat_5 .26795_spider_16 .31520_spide  
.. .12698_bat_1 .17165_spider_38 .19117_spider_17 .21855_spider_35 .27140_spider_43 .31730_spide  
.10037_spider_19 .12869_spider_25 .17933_spider_24 .19315_spider_6 .22436_spider_41 .2751_spider_11 .5489_spide  
.10279_bat_4 .13642_spider_4 .18102_spider_37 .19618_spider_29 .22943_spider_2 .28073_spider_14 .5713_spide  
.11080_spider_3 .14791_bat_3 .18139_spider_49 .20041_spider_27 .25249_spider_22 .28999_spider_9 .5904_spide  
.11527_spider_32 .1515_spider_46 .18230_spider_45 .20453_spider_21 .26268_bat_2 .30850_spider_13 .6706_spide  
.1190_spider_23 .15948_spider_34 .18719_spider_40 .21387_spider_42 .26793_spider_39 .31046_spider_8 .6857_spide  
  
~/Castle/Cellar  
[mission 9] $ rm .*****_spider_**  
  
~/Castle/Cellar  
[mission 9] $ ls -a  
. .. .10279_bat_4 .12698_bat_1 .14791_bat_3 .21447_bat_5 .26268_bat_2 10196_bat_4 17487_bat_5 19095_bat_2 284  
  
~/Castle/Cellar  
[mission 9] $ gsh check
```

Congratulations, mission 9 has been successfully completed!

```
.,--.  
.:-,-'.-';-':-'  
/,-,-;,-:,:-'  
/,-,-;,-:,:-'  
|| :;:;:;  
|| :;:;:;  
\\ . || :;:;:;-!()oo @!()@.-'  
. '-;|-,-'.@$@.6 ()$%-o.'@||  
'>-,i%()@'@.%'-,-o _.'||  
jgs ||-,-.o.-'_,-,-o |'||  
|| =[ '_,-,-@/,-' o |'||  
|| '_,-,]=|| l' | o |'||
```

Congratulations !  
From now on, the ``ls`` command will automatically show a "/" character at the end of

```
~/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  
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".  
  
~/Castle/Cellar  
[mission 10] $ cd  
  
~/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  
17784_suit_of_armour 4036_decorative_shield 57169_stag_head standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ cp standard_* ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 10] $ ls  
17784_suit_of_armour 4036_decorative_shield 57169_stag_head standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ cp standard_? ~/Forest/Hut/Chest  
  
~/Castle/Great_hall  
[mission 10] $ ls  
17784_suit_of_armour 4036_decorative_shield 57169_stag_head standard_1 standard_2 standard_3 standard_4  
  
~/Castle/Great_hall  
[mission 10] $ cd ~/Forest/Hut/Chest  
  
~/Forest/Hut/Chest  
[mission 10] $ ls  
coin_1 coin_2 coin_3 standard_1 standard_2 standard_3 standard_4  
  
~/Forest/Hut/Chest  
[mission 10] $ gsh check  
  
Congratulations, mission 10 has been successfully completed!
```

Il comando alias, ci permette di assegnare ad una variabile, una serie di comandi. Così da poterli richiamare con il solo nome della variabile.

Utile per l'utilizzo di comandi che devono essere ripetuti più volte.

```
[mission 16] $ gsh goal
```

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.

```
~/Forest/Hut/Chest
```

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

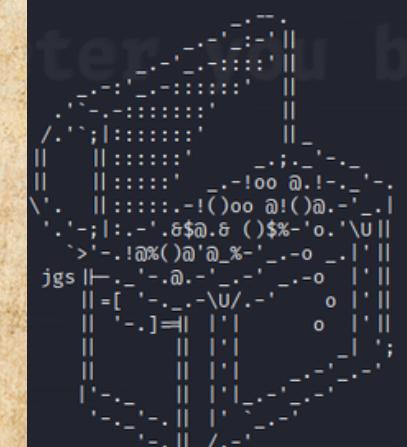
```
~/Forest/Hut/Chest
```

```
[mission 16] $ gsh check
```

```
Congratulations, mission 16 has been successfully completed!
```

Congratulations!

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



```
daniele@kali: ~
File Actions Edit View Help
[mission 20] $ gsh goal

    / \ 
    | \ 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.
    | |
    | | / 
    | | \ 
    | | . .
    | | . .
    | | . .
    | | . .
    | | . .
    | | . .
    | | . .
    | | . .

~/Garden/Maze
[mission 20] $ ls -R
.:
4fa9470a9d96390cc18/  75f134af09a437537e96f57c2b0729/  f20094724e2b98617/
./4fa9470a9d96390cc18:
1818f72986c/  7bc7a8f60028b56b37/  f614db907f0b60a/
./4fa9470a9d96390cc18/1818f72986c:
a2269f5688d8dd15e819324a67fa/  a92d9b2b5f1a1/  c7e2c27a75220d895e22ddc7b/
./4fa9470a9d96390cc18/1818f72986c/a2269f5688d8dd15e819324a67fa:
./4fa9470a9d96390cc18/1818f72986c/a92d9b2b5f1a1:
./4fa9470a9d96390cc18/1818f72986c/c7e2c27a75220d895e22ddc7b:
./4fa9470a9d96390cc18/7bc7a8f60028b56b37:
3ac1ef9eae15bf5577d0ca8/  57add257a6b2e34b82dddca472cb90f/  e1e9f671f1e/
./4fa9470a9d96390cc18/7bc7a8f60028b56b37/3ac1ef9eae15bf5577d0ca8:
./4fa9470a9d96390cc18/7bc7a8f60028b56b37/57add257a6b2e34b82dddca472cb90f:
./4fa9470a9d96390cc18/7bc7a8f60028b56b37/e1e9f671f1e:
./4fa9470a9d96390cc18/f614db907f0b60a:
32405a9908cahe8/  3421f9c9c66436002ac/  b7hd0c0d01893chb3/
```

