

Relazione PROGETTO FINALE M2W8-D4

Traccia:

Nell'esercizio di oggi installeremo su Kali Linux un gioco per familiarizzare con i comandi della shell.
Installazione: Per installare il gioco GameShell, eseguire in ordine i seguenti comandi, assicurarsi di avere connettività ad Internet prima e di aver eseguito il comando sudo apt update sudo apt install gettext man-db procps psmisc nano tree bsdmainutils x11-apps wget wget
<https://github.com/phyver/GameShell/releases/download/latest/gameshell.sh> Una volta eseguiti i comandi, il gioco può essere lanciato con il comando bash gameshell.sh

Nota Bene: ho iniziato il gioco prima della lezione, sono uscito e rientrato e impossibilitato ad avere la History dei comandi immessi su shell

```
(kali㉿kali)-[~]
$ bash gameshell.sh
Warning: there is a more recent savefile
You can
(1) keep the given file (gameshell.sh)
(2) switch to the last savefile (gameshell-save.sh)
(3) abort

What do you want to do? [123] 2

| _____+--+
| | Use the command
| | $ gsh help
| | to get the list of "gsh" commands.
| +---+
| |
| ~
[mission 10] $ history
 1 # START OF COMMANDS HISTORY
 2 history

~[mission 10] $ 2
2: command not found

~[mission 10] $
```

Check Point LIVELLO 10 + HISTORY

```
File Actions Edit View Help
cp: cannot create regular file '/World/Forest': No such file or directory
~/Castle/Great_hall
[mission 10] $ cp standard_1 ~/
~/Castle/Great_hall
[mission 10] $ cp standard_2 ~/
~/Castle/Great_hall
[mission 10] $ cp standard_3 ~/
~/Castle/Great_hall
[mission 10] $ cp standard_4 ~/
~/Castle/Great_hall
[mission 10] $ cd
~
[mission 10] $ ls
Castle/ Forest/ Garden/ Mountain/ Stall/ standard_1 standard_2 standard_3 standard_4
~
[mission 10] $ mv standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest
~
[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!

+-----+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+-----+
~/Forest/Hut/Chest
[mission 11] $ █
```



```
File Actions Edit View Help
~/Forest/Hut/Chest
[mission 10] $ gsh check
Congratulations, mission 10 has been successfully completed!
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
--+
~/Forest/Hut/Chest
[mission 11] $ history
 1 # START OF COMMANDS HISTORY
 2 history
 3 2
 4 gsh goal
 5 pwd
 6 cd Castle
 7 ls
 8 cd Great_Hall
 9 cdGreat_hall
10 cd Great_hall
11 ls
12 cp standard_1 ~/Forest/Hut/Chest standard_1
13 cp standard_1 ~Chest/
14 tree -d
15 cd
16 tree -d
17 ~/Castle/Great_hall
18 cd ~/Castle/Great_hall
19 ls
20 cp standard_1 /World/Forest/Hut/Chest
21 cp standard_1 /World/Forest
22 cp standard_1 ~/
23 cp standard_2 ~/
24 cp standard_3 ~/
25 cp standard_4 ~/
26 cd
27 ls
28 mv standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest
29 cd ~/Forest/Hut/Chest
30 ls
31 gsh check
32 history
~/Forest/Hut/Chest
[mission 11] $
```



Cerca

LIVELLO 11

```
kali@kali: ~
File Actions Edit View Help
10102_tapestry_02      39816_tapestry_04  50222_tapestry_06  55734_suit_of_armour  65341_tapestry_09  standard_3
29409_tapestry_08      40877_tapestry_10  52728_tapestry_07  56996_stag_head    standard_1      standard_4
29704_decorative_shield 47480_tapestry_01  54797_tapestry_05  63210_tapestry_03      standard_2

~/Castle/Great_hall
[mission 11] $ ls -l | grep tapestry
-rw-r--r-- 1 kali kali 574 Oct 25 14:06 10102_tapestry_02
-rw-r--r-- 1 kali kali 3877 Oct 25 14:06 29409_tapestry_08
-rw-r--r-- 1 kali kali 786 Oct 25 14:06 39816_tapestry_04
-rw-r--r-- 1 kali kali 1214 Oct 25 14:06 40877_tapestry_10
-rw-r--r-- 1 kali kali 785 Oct 25 14:06 47480_tapestry_01
-rw-r--r-- 1 kali kali 1290 Oct 25 14:06 50222_tapestry_06
-rw-r--r-- 1 kali kali 1214 Oct 25 14:06 52728_tapestry_07
-rw-r--r-- 1 kali kali 3877 Oct 25 14:06 54797_tapestry_05
-rw-r--r-- 1 kali kali 3877 Oct 25 14:06 63210_tapestry_03
-rw-r--r-- 1 kali kali 1214 Oct 25 14:06 65341_tapestry_09

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

~/Castle/Great_hall
[mission 11] $ cd

~
[mission 11] $ ls
10102_tapestry_02  39816_tapestry_04  47480_tapestry_01  52728_tapestry_07  63210_tapestry_03  Castle/  Garden/  Stall/
29409_tapestry_08  40877_tapestry_10  50222_tapestry_06  54797_tapestry_05  65341_tapestry_09  Forest/ Mountain/

~
[mission 11] $ mv *_tapestry_* ~/Forest/Hut/Chest

~
[mission 11] $ gsh check

Congratulations, mission 11 has been successfully completed!

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

LIVELLO 12

```
kali㉿kali: ~
File Actions Edit View Help
~/Castle/Main_tower/First_floor
[mission 12] $ cp 1985 painting_ITwIwqgJ ~/cp: cannot stat '1985': No such file or directory
~/Castle/Main_tower/First_floor
[mission 12] $ cp painting_ITwIwqgJ ~/cp: cannot stat 'painting_ITwIwqgJ': No such file or directory
~/Castle/Main_tower/First_floor
[mission 12] $ cd ~
[mission 12] $ ls
Castle/ Forest/ Garden/ Mountain/ painting_ITwIwqgJ Stall/
[mission 12] $ mv painting_ITwIwqgJ ~/Forest/Hut/Chest
[mission 12] $ cd ~/Chest
bash: cd: /home/kali/gameshell/World/Chest: No such file or directory
[mission 12] $ cd ~/Forest/Hut/Chest
~/Forest/Hut/Chest
[mission 12] $ ls
10102_tapestry_02 40877_tapestry_10 52728_tapestry_07 65341_tapestry_09 coin_3 standard_2
29409_tapestry_08 47480_tapestry_01 54797_tapestry_05 coin_1 painting_ITwIwqgJ standard_3
39816_tapestry_04 50222_tapestry_06 63210_tapestry_03 coin_2 standard_1 standard_4
~/Forest/Hut/Chest
[mission 12] $ gsh check
Congratulations, mission 12 has been successfully completed!
| _____ |
| Use the command |
| $ gsh help |
| to get the list of "gsh" commands. |
| _____ |
~/Forest/Hut/Chest
[mission 13] $
```



LIVELLO 13

```
kali@kali: ~
File Actions Edit View Help
22 23 24 25 26 27 28 20 21 22 23 24 25 26 17 18 19 20 21 22 23
29 30 27 28 29 30 31 24 25 26 27 28 29 30

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

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

~/Forest/Hut/Chest
[mission 13] $ cal September
cal: not a valid year September

~/Forest/Hut/Chest
[mission 13] $ gsh check
What was the day of the week for the 05-25-1984?
 1 : Monday
 2 : Tuesday
 3 : Wednesday
 4 : Thursday
 5 : Friday
 6 : Saturday
 7 : Sunday
Your answer: 5

Congratulations, mission 13 has been successfully completed!

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

~/Forest/Hut/Chest
[mission 14] \$ █

LIVELLO 14

```
kali@kali: ~
File Actions Edit View Help
    la
    for the command
    ls -A
    and check that it works as expected.
    How fortunate, there is a nice rock hidden just where you are.

    Useful commands
    =====
alias STRING='COMMAND'
Create a synonym for a string, that will stand for a command.

~/Forest/Hut/Chest
[mission 14] $ alias la='ls -A'

~/Forest/Hut/Chest
[mission 14] $ la
10102_tapestry_02 .35972_coin_2      50222_tapestry_06 65341_tapestry_09 .nice_rock      standard_3
.11920_coin_1     39816_tapestry_04 52728_tapestry_07 coin_1           painting_ITwIwqgJ standard_4
.15496_coin_3     40877_tapestry_10 54797_tapestry_05 coin_2           standard_1
29409_tapestry_08 47480_tapestry_01 63210_tapestry_03 coin_3           standard_2

~/Forest/Hut/Chest
[mission 14] $ gsh check
Congratulations, mission 14 has been successfully completed!

    |
    +-- Use the command
    |   $ gsh help
    |   to get the list of "gsh" commands.
    +-- |
~/Forest/Hut/Chest
[mission 15] $
```



CHECK POINT - LIVELLO 15

```
kali@kali: ~
File Actions Edit View Help
| Useful commands
| =====
| nano FILE
|   Edit the file from the shell.
|   (If the file does not exist, it will be created.)
|
|   Keybindings are listed at the bottom of the screen (the "^^" symbol means "Control"). The
|   most important ones are:
|     Control-x    quit
|     Control-o    save
|     Control-w    search for a string
|
|   Remark: do not use Control-s or Control-z!
()
( )=()
` `

~/Forest/Hut/Chest
[mission 15] $ Touch journal.txt
Command 'Touch' not found, did you mean:
  command 'touch' from deb coreutils
Try: sudo apt install <deb name>

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

~/Forest/Hut/Chest
[mission 15] $ ^C

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

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

Congratulations, mission 15 has been successfully completed!

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

~/Forest/Hut/Chest
[mission 16] $
```

HISTORY LIVELLO 15

```
File Actions Edit View Help
[mission 15] $ gsh check
Congratulations, mission 15 has been successfully completed!

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


~/Forest/Hut/Chest
[mission 16] $ history
1 # START OF COMMANDS HISTORY
2 history
3 2
4 gsh goal
5 pwd
6 cd Castle
7 ls
8 cd Great_Hall
9 cdGreat_hall
10 cd Great_hall
11 ls
12 cp standard_1 ~/Forest/Hut/Chest standard_1
13 cp standard_1 ~Chest/
14 tree -d
15 cd
16 tree -d
17 ~/Castle/Great_hall
18 cd ~/Castle/Great_hall
19 ls
20 cp standard_1 /World/Forest/Hut/Chest
21 cp standard_1 /World/Forest
22 cp standard_1 ~/
23 cp standard_2 ~/
24 cp standard_3 ~/
25 cp standard_4 ~/
26 cd
27 ls
28 mv standard_1 standard_2 standard_3 standard_4 ~/Forest/Hut/Chest
29 cd ~/Forest/Hut/Chest
30 ls
31 gsh check
32 history
33 gsh goal
34 ls
35 cd
36 cd ~/Great_hall
```

```
kali@kali: ~
File Actions Edit View Help
33 gsh goal
34 ls
35 cd
36 cd ~/Great_hall
37 tree -d
38 cd /Castle/Great_hall
39 cd ~/Castle/Great_hall
40 ls
41 ls -l | grep tapestry
42 cp *_tapestry_* ~/
43 cd
44 ls
45 mv *_tapestry_* ~/Forest/Hut/Chest
46 gsh check
47 gsh goal
48 cd
49 tree -d
50 cd ~/Castle/Main_tower/First-floor
51 cd ~/Castle/Main_tower
52 pwd
53 cd First_floor
54 pwd
55 ls
56 ls -l
57 cp 1985 painting_ITwIwqgJ ~/
58 cp painting_ITwIwqgJ ~/
59 cd
60 ls
61 mv painting_ITwIwqgJ ~/Forest/Hut/Chest
62 cd ~/Chest
63 cd ~/Forest/Hut/Chest
64 ls
65 gsh check
66 gsh goal
67 cal
68 cal September
69 cal year
70 gsh reset
71 cal
72 cal YEAR
73 GSH CHECK
74 gsh check
75 cal 1984
76 cal September
77 gsh check
78 gsh goal
79 alias la='ls -A'
80 la
81 gsh check
82 gsh goal
83 Touch journal.txt
84 touch journal.txt
```

```
78 gsh goal
79 alias la='ls -A'
80 la
81 gsh check
82 gsh goal
83 Touch journal.txt
84 touch journal.txt
85 nano journal.txt
86 gsh check
87 history

~/Forest/Hut/Chest
[mission 16] $ █
```

LIVELLO 16

LIVELLO 17

```
kali㉿kali: ~
File Actions Edit View Help
You are back in the cellar.

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

~/Castle/Cellar
[mission 17] $ gsh reset

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

~/Castle/Cellar
[mission 17] $ cd .Lair_of_the_spider_queen\ ZpxnHkIkWqtCjllH fqgSvydSAVldtOHj/
~/Castle/Cellar/.Lair_of_the_spider_queen ZpxnHkIkWqtCjllH fqgSvydSAVldtOHj
[mission 17] $ ls -A
DMRlyjojpQlcNY_baby_bat_UQmfTiscoBhvfefU NncbpvkJgKYFNcAr_spider_queen_FWPNTSnrfRINMfxb

~/Castle/Cellar/.Lair_of_the_spider_queen ZpxnHkIkWqtCjllH fqgSvydSAVldtOHj
[mission 17] $ rm NncbpvkJgKYFNcAr_spider_queen_FWPNTSnrfRINMfxb

~/Castle/Cellar/.Lair_of_the_spider_queen ZpxnHkIkWqtCjllH fqgSvydSAVldtOHj
[mission 17] $ gsh check
Perfect, it took you only 15 seconds to complete this mission!

Congratulations, mission 17 has been successfully completed!

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

~/Castle/Cellar/.Lair_of_the_spider_queen ZpxnHkIkWqtCjllH fqgSvydSAVldtOHj
[mission 18] $ █
```

LIVELLO 19

LIVELLO 20



HISTORY LIVELLO 20 (ho iniziato il giorno dopo a farlo)

```
      ..'':*::' * ^ * .`/.\\'. '
      *
      *

~ [mission 20] $ gsh check
What's a valid 4 letters sequence? abap

Congratulations, mission 20 has been successfully completed!

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

~ [mission 21] $ history
1 # START OF COMMANDS HISTORY
2 gsh goal
3 charmiglio; charmiglio; charmiglio;
4 gsh check
5 gsh reset
6 gsh goal
7 gsh check & charmiglio & charmiglio & charmiglio
8 gsh goal
9 Charmiglio vail
10 Charmiglio boom
11 Charmiglio apab
12 Charmiglio aocs
13 Charmiglio abap
14 gsh check
15 history

~ [mission 21] $ █
```

LIVELLO 21

LIVELLO 22

```
kali@kali: ~

File Actions Edit View Help

./9698054db3ac372207995091b4d7/fea26ab09aeae/0df4c3189d9de58e4bc88d0035b:
./9698054db3ac372207995091b4d7/fea26ab09aeae/8617f7c3bed4622ad9cff8607dc99f5:

~/Garden/Maze
[mission 22] $ mv 00000_silver_coin_00000 ~/Forest/Hut/Chest
mv: cannot stat '00000_silver_coin_00000': No such file or directory

~/Garden/Maze
[mission 22] $ mv 00000_silver_coin_00000 ~/
mv: cannot stat '00000_silver_coin_00000': No such file or directory

~/Garden/Maze
[mission 22] $ mv 00000_silver_coin_00000 ~/Forest
mv: cannot stat '00000_silver_coin_00000': No such file or directory

~/Garden/Maze
[mission 22] $ mv *coin* ~/Forest/Hut/Chest
mv: cannot stat '*coin*': No such file or directory

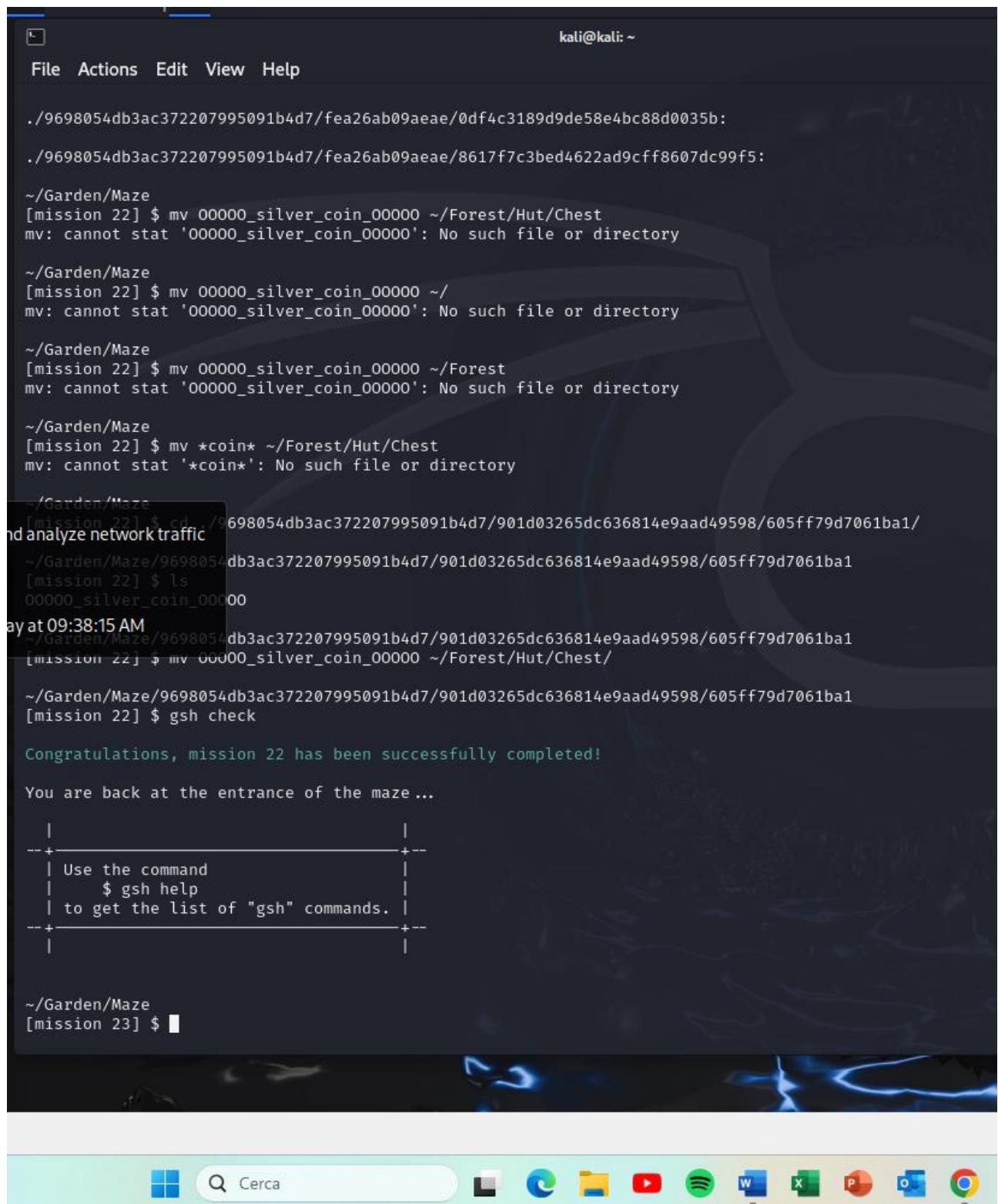
~/Garden/Maze
[mission 22] $ cd /9698054db3ac372207995091b4d7/901d03265dc636814e9aad49598/605ff79d7061ba1/
and analyze network traffic
~/Garden/Maze/9698054db3ac372207995091b4d7/901d03265dc636814e9aad49598/605ff79d7061ba1
[mission 22] $ ls
00000_silver_coin_00000
ay at 09:38:15 AM
~/Garden/Maze/9698054db3ac372207995091b4d7/901d03265dc636814e9aad49598/605ff79d7061ba1
[mission 22] $ mv 00000_silver_coin_00000 ~/Forest/Hut/Chest/
~/Garden/Maze/9698054db3ac372207995091b4d7/901d03265dc636814e9aad49598/605ff79d7061ba1
[mission 22] $ gsh check

Congratulations, mission 22 has been successfully completed!

You are back at the entrance of the maze ...

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

~/Garden/Maze
[mission 23] \$ █



LIVELLO 23

```
1 2 3 4 | □ ■ kali@kali: ~
File Actions Edit View Help
└── fcf4fd8a81a3f3be3073c57683
    ├── f09c9b61f3a4ea3
    ├── 2ab1c48bf24b9357f44c809f33fa
    ├── 580d3deabb
    ├── 6efaf1ee043b0a9836
    ├── 77232eed2a80b378c6f
    ├── 953caa9ac10e1a785896af7b04e33
    ├── aa0231909532b6f746bd3d4df
    ├── ad123c6531da63
    ├── dc70cd4f1e0d36f4dcfc58
    └── e96088f104cd4984
        └── f5a6f06b7a88d5654fe9cbd715ed
Shed
└── bucket
    └── wheelbarrow
1114 directories, 4 files
~/Garden
[mission 23] $ cd Maze
~/Garden/Maze
[mission 23] $ cd ./7bd3b4d633a266522b3496/c4f2c78a3/d0e73d7585ac16439e96e/
~/Garden/Maze/7bd3b4d633a266522b3496/c4f2c78a3/d0e73d7585ac16439e96e
[mission 23] $ ls
Gold_Coin_2
~/Garden/Maze/7bd3b4d633a266522b3496/c4f2c78a3/d0e73d7585ac16439e96e
[mission 23] $ mv Gold_Coin_2 ~/Forest/Hut/Chest/
~/Garden/Maze/7bd3b4d633a266522b3496/c4f2c78a3/d0e73d7585ac16439e96e
[mission 23] $ gsh check
Congratulations, mission 23 has been successfully completed!
You are back at the entrance of the maze ...
+-----+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+-----+
~/Garden/Maze
[mission 24] $ █
```



Cerca



LIVELLO 24

```
1 2 3 4 | □ ■ kali@kali:~  
File Actions Edit View Help  
~/Mountain/Cave  
[mission 24] $ ls  
Book_of_potions/ servillus  
~/Mountain/Cave  
[mission 24] $ cat Book_of_potions  
cat: Book_of_potions: Is a directory  
~/Mountain/Cave  
[mission 24] $ cd Book_of_potions/  
~/Mountain/Cave/Book_of_potions  
[mission 24] $ ls  
page_01 page_03 page_05 page_07 page_09 page_11 page_13  
page_02 page_04 page_06 page_08 page_10 page_12 table_of_contents  
~/Mountain/Cave/Book_of_potions  
[mission 24] $ cd .. /  
~/Mountain/Cave  
[mission 24] $ mv servillus /Book_of_potions  
mv: cannot move 'servillus' to '/Book_of_potions': Permission denied  
~/Mountain/Cave  
[mission 24] $ head -n 6 Book_of_potions/page_07  
Herbal tea  
_____  
1) Boil water.  
2) Add herbs from the forest.  
3) Let it sit for five minutes and drink while hot.  
~/Mountain/Cave  
[mission 24] $ gsh check  
Congratulations, mission 24 has been successfully completed!  
| |  
--+-----+--  
| Use the command |  
| $ gsh help |  
| to get the list of "gsh" commands. |  
--+-----+--  
| |  
~/Mountain/Cave  
[mission 25] $ █  
Cerca
```



Cerca



LIVELLO 25

```
kali@kali: ~
File Actions Edit View Help
~/Mountain/Cave/Book_of_potions
[mission 25] $ cd ../

~/Mountain/Cave
[mission 25] $ tail -n 9 page_12
tail: cannot open 'page_12' for reading: No such file or directory

~/Mountain/Cave
[mission 25] $ cd Book_of_potions/

~/Mountain/Cave/Book_of_potions
[mission 25] $ cp page_12 ../

~/Mountain/Cave/Book_of_potions
[mission 25] $ cd ../

~/Mountain/Cave
[mission 25] $ ls
Book_of_potions/  page_12  servillus

~/Mountain/Cave
[mission 25] $ tail -n 9 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 25] $ gsh check

Congratulations, mission 25 has been successfully completed!

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

~/Mountain/Cave
[mission 26] \$ █

HISTORY CHECK POINT LIVELLO 25

```
v | 1 2 3 4 | □ ■
kali@kali: ~
File Actions Edit View Help
75 mv servillus /Book_of_potions
76 head -n 6 Book_of_potions/page_07
77 gsh check
78 gsh goal
79 ls
80 cat Book_of_potions/
81 cd Book_of_potions/
82 ls
83 cat page_12
84 gsh check
85 gsh reset
86 ls
87 cat page_01
88 cat page_03
89 cat page_02
90 cat page_12
91 tail page_12
92 gsh check
93 gsh reset
94 gsh goal
95 cat Book_of_potions
96 cat
97 cd ../
98 ls
99 cat Book_of_potions/
100 cd Book_of_potions/
101 cat Book_of_potions
102 gsh reaet
103 gsh reset
104 gsh goal
105 cat Book_of_potions
106 cd ../
107 tail -n 9 page_12
108 cat Book_of_potions
109 tree
110 cd Book_of_potions/
111 ls
112 cd ../
113 tail -n 9 page_12
114 cd Book_of_potions/
115 cp page_12 ../
116 cd ../
117 ls
118 tail -n 9 page_12
119 gsh check
120 history

~/Mountain/Cave
[mission 26] $ █
```

LIVELLO 26

```
Dispositivi Aiuto  
1 2 3 4 |    
kali@kali: ~  
File Actions Edit View Help  
~/Mountain/Cave/Book_of_potions  
[mission 26] $ cp page_01 page_02 .. /  
~/Mountain/Cave/Book_of_potions  
[mission 26] $ cd .. /  
~/Mountain/Cave  
[mission 26] $ cat page_01 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 26] $ gsh check  
Congratulations, mission 26 has been successfully completed!  
  
|  
--+-----+--  
| Use the command  
| $ gsh help  
| to get the list of "gsh" commands.  
|-----+--  
~/Mountain/Cave  
[mission 27] $   
  Cerca        
```

LIVELLO 27

```
kali@kali: ~
File Actions Edit View Help
16) Drink the potion from the cauldron.

~/Mountain/Cave
[mission 27] $ cat page_03 page_04 | tail -n 8
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] $ cat page_03 page_04 | tail -n 9
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] $ cat page_03 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!
```



Cerca



LIVELLO 28

oracle VM VirtualBox
nento Dispositivi Aiuto

1 2 3 4

kali@kali: ~

File Actions Edit View Help

2) Serve cold, in a pint.

~/Mountain/Cave
[mission 28] \$ head -n 6 | tail -n 3
^C

~/Mountain/Cave
[mission 28] \$ cat 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 28] \$ cat 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 28] \$ gsh check

Congratulations, mission 28 has been successfully completed!

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

~/Mountain/Cave
[mission 29] \$ *#0*
δ_**/~
!\$-#

LIVELLO 29

```
kali@kali: ~
File Actions Edit View Help
bash: kill: kill: arguments must be process or job IDs
~/Mountain/Cave
[mission 29] $ *#0*
&_**/~
!$-#
kill
*#0*
&_**/~
!$-#
*#0*
&_**/~
!$-#
kill
kill 148026
kill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
~/Mountain/Cave
[mission 29] $ gsh check
Congratulations, mission 29 has been successfully completed!
|-----+-----|
| Use the command |
|   $ gsh help |
| to get the list of "gsh" commands. |
|-----+-----|
~/Mountain/Cave
[mission 30] $ *#0*
&_**/~
!$-#

```



LIVELLO 30

```
| 1 2 3 4 | [ ] [ ] 
[ ]                               kali@kali: ~
File Actions Edit View Help
PS: command not found
~/Mountain/Cave
[mission 30] $ ps
          *#@*
&_**/~
!$-#
PID TTY      TIME CMD
111125 pts/0    00:00:00 zsh
111241 pts/0    00:00:00 bash
111289 pts/0    00:00:01 bash
169578 pts/0    00:00:00 spell
170313 pts/0    00:00:00 ps

~/Mountain/Cave
[mission 30] $ kill -s
          *#@*
&_**/~
!$-#
KILL 169578

~/Mountain/Cave
[mission 30] $ ps
          PID TTY      TIME CMD
111125 pts/0    00:00:00 zsh
111241 pts/0    00:00:00 bash
111289 pts/0    00:00:01 bash
170512 pts/0    00:00:00 ps

~/Mountain/Cave
[mission 30] $ gsh check
Congratulations, mission 30 has been successfully completed!

+-----+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+-----+
~/Mountain/Cave
[mission 31] $ █
```



HISTORY AL LIVELLO 30

DISPOSITIVI AIUTO

1 2 3 4 | □ A

kali@kali: ~

File Actions Edit View Help

```
63 cat page_13
64 gsh check
65 gsh reset
66 ls
67 cat page_13
68 head -n 6 | tail -n 3
69 cat page_13
70 cat page_13 | head -n 6 | tail -n 3
71 gsh check
72 gsh goal
73 ps
74 kill spell
75 kil 148026
76 killkill
77 kill
78 ps
79 kill killkill kill
80 kill kill
81 kill
82 kill 148026
83 gsh check
84 clear
85 gsh goal
86 ps
87 kill 153014 all
88 kill 153014 kill clear
89 ps
90 kill all
91 kkill kill 153014
92 kikill killkill kill 153014
93 kill 153014
94 clear
95 psp
96 gsh reset
97 ps
98 kill 157008
99 gsh reset
100 ps
101 kill 157566
102 gsh check
103 ps
104 kill 158167
105 kill -9 158167
106 gsh check
107 ps
108 kill -9 159343
109 ps
110 gsh check
111 ps
```

Cerca

Dispositivi Aiuto

1 2 3 4 |

kali@kali: ~

File Actions Edit View Help

```
111 ps
112 gsh goal
113 gsh reset
114 ps
115 kill -9 161181
116 gsh check
117 ps
118 kill 162270
119 term
120 TERM
121 gsh reset
122 ps
123 kill -s TERM 163471
124 ps
125 kill -s KILL 163471
126 ps
127 gsh check
128 ps
129 gsh reset
130 ps
131 kill -s KCLEAR
132 PS
133 gsh reset
134 ps
135 kill-s TERM 166081
136 gsh reset
137 ps
138 kill -s TERM 166721
139 ps
140 kill -s KILL ALL
141 gsh reset
142 ps
143 kill -s TERM 167520
144 KILL -S KILL 167520
145 gsh reset
146 ps
147 kill -s TERM 169266
148 ps
149 kill -s KILL 169266
150 PS
151 ps
152 kill -s T 169578
153 PS
154 ps
155 kill -s KILL 169578
156 ps
157 gsh check
158 HISTORY
159 history
```

Cerca

LIVELLO 31

```
kali@kali: ~
File Actions Edit View Help
52435_snowflake 56416_snowflake 12692_snowflake 21716_snowflake
28886_snowflake 62870_snowflake 21886_snowflake 29940_snowflake
58848_snowflake 290_snowflake 44798_snowflake 17943_snowflake
27722_snowflake 61555_snowflake 7408_snowflake 19605_snowflake
12348_snowflake 22858_snowflake 40125_snowflake 21968_snowflake
45018_snowflake 25577_snowflake 18140_snowflake 26340_snowflake
26516_snowflake 30048_snowflake 28858_snowflake 34767_snowflake
51914_snowflake 58669_snowflake 17165_snowflake 12661_snowflake
30500_snowflake 45697_snowflake 34905_snowflake 39092_snowflake
63872_snowflake 24149_snowflake 45708_snowflake 49800_snowflake
50784_snowflake 40439_snowflake 52355_snowflake 36770_snowflake
37931_snowflake 38480_snowflake 31703_snowflake 52517_snowflake
62067_snowflake 62152_snowflake 6862_snowflake 10857_snowflake
24424_snowflake 4440_snowflake 171_snowflake 4415_snowflake
41394_snowflake .24642_bat_1 49631_snowflake 48180_snowflake
41800_snowflake 4124_snowflake 6820_snowflake 25546_snowflake
40795_snowflake 18226_snowflake 7652_snowflake 1598_snowflake
1932_snowflake 39005_snowflake 4052_snowflake 19610_snowflake
2054_snowflake 38824_snowflake 42002_snowflake 18225_snowflake
27142_snowflake 9351_snowflake 43879_snowflake 64935_snowflake
21217_snowflake 641_snowflake 37289_snowflake 58337_snowflake
20064_snowflake 18723_bat_2 22265_bat_3 16576_snowflake
44466_snowflake 65036_snowflake 46951_snowflake 22400_snowflake
61789_snowflake .3762_bat_3 61079_snowflake 34831_snowflake
63396_snowflake 819_snowflake 33761_snowflake 62414_snowflake
12720_snowflake 54086_snowflake 3052_snowflake 51382_snowflake
37159_snowflake 18928_snowflake 54471_snowflake 46991_snowflake
17246_snowflake 17878_snowflake 30106_snowflake 25488_snowflake
3413_snowflake 44756_snowflake 22072_snowflake 20830_snowflake
1700_snowflake 22996_snowflake 21609_snowflake 22173_snowflake
28644_snowflake 9488_snowflake 32767_snowflake 12931_snowflake
11026_snowflake 42893_snowflake 33584_snowflake 32737_snowflake
42299_snowflake 5482_snowflake 53191_snowflake 60850_snowflake
61438_snowflake 24529_snowflake 40280_snowflake 52541_snowflake
30697_snowflake 23747_snowflake 34796_snowflake 25692_snowflake
51338_snowflake 18462_snowflake 9004_snowflake 19343_snowflake
24152_snowflake 8491_bat_4 25686_snowflake 11620_snowflake
28318_snowflake 9947_snowflake 53325_snowflake 4550_snowflake
37906_snowflake 18236_snowflake 6709_snowflake 33258_snowflake
59522_snowflake 49341_snowflake 2473_snowflake 62581_snowflake
25303_snowflake 53374_snowflake 33573_snowflake 9636_snowflake
1428_snowflake 49157_snowflake 5845_snowflake 4963_snowflake
53061_snowflake 43516_snowflake 3653_snowflake

~/Castle/Cellar
[mission 31] $ gsh check

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



LIVELLO 32

Dispositivi Aiuto

1 2 3 4 |

kali@kali: ~

File Actions Edit View Help

44 + 51 = ?? 128
Too bad! The answer was 95 ...

Sorry, mission 32 hasn't been completed.

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

~/Castle/Cellar
[mission 32] \$ gsh reset

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

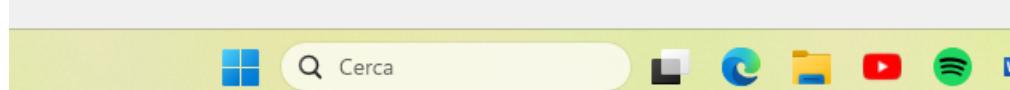
~/Castle/Cellar
[mission 32] \$ gsh check

8 + 93 = ?? 101
59 + 1 = ?? 60
95 + 14 = ?? 109
44 + 53 = ?? 97
52 + 79 = ?? 131

Congratulations, mission 32 has been successfully completed!

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

~/Castle/Cellar
[mission 33] \$



LIVELLO 33

Dispositivo Aiuto

1 2 3 4 | kali@kali: ~

File Actions Edit View Help

```
~/Castle/Main_building/Library
[mission 33] $ find ~/Castle/Main_building/Library -type f -name "*math*"
~/Castle/Main_building/Library
[mission 33] $ gsh check
18 * 79 = ??
That's not even a number!
```

Sorry, mission 33 hasn't been completed.

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

```
~/Castle/Main_building/Library
[mission 33] $ gsh check < Mathematics_101
20 * 27 = ?? 52 * 3 = ?? 89 * 56 = ?? 56 * 7 = ?? 60 * 88 = ?? 2 * 47 = ?? 59 * 99 = ?? 67 * 15 = ?? 53 * 48 = ?? 67 * 5 =
?? 40 * 26 = ?? 91 * 94 = ?? 5 * 29 = ?? 6 * 29 = ?? 2 * 76 = ?? 56 * 47 = ?? 45 * 48 = ?? 53 * 88 = ?? 24 * 42 = ?? 44 *
30 = ?? 62 * 98 = ?? 60 * 1 = ?? 69 * 35 = ?? 64 * 4 = ?? 63 * 3 = ?? 70 * 42 = ?? 74 * 13 = ?? 94 * 76 = ?? 49 * 18 = ??
22 * 61 = ?? 34 * 2 = ?? 47 * 51 = ?? 87 * 12 = ?? 25 * 3 = ?? 34 * 53 = ?? 17 * 22 = ?? 24 * 43 = ?? 70 * 56 = ?? 68 * 1
9 = ?? 61 * 87 = ?? 57 * 15 = ?? 62 * 54 = ?? 92 * 19 = ?? 96 * 74 = ?? 60 * 91 = ?? 63 * 63 = ?? 18 * 66 = ?? 1 * 17 = ??
67 * 23 = ?? 14 * 62 = ?? 78 * 80 = ?? 4 * 78 = ?? 88 * 84 = ?? 56 * 13 = ?? 80 * 31 = ?? 26 * 37 = ?? 98 * 50 = ?? 26 *
53 = ?? 32 * 51 = ?? 25 * 29 = ?? 69 * 31 = ?? 29 * 2 = ?? 71 * 58 = ?? 90 * 89 = ?? 42 * 84 = ?? 19 * 32 = ?? 44 * 54 = ??
35 * 76 = ?? 94 * 57 = ?? 33 * 89 = ?? 54 * 12 = ?? 100 * 15 = ?? 18 * 97 = ?? 94 * 6 = ?? 22 * 66 = ?? 50 * 60 = ?? 92
* 85 = ?? 12 * 42 = ?? 74 * 62 = ?? 19 * 71 = ?? 4 * 51 = ?? 20 * 83 = ?? 38 * 21 = ?? 85 * 100 = ?? 89 * 5 = ?? 60 * 52 =
?? 92 * 81 = ?? 65 * 27 = ?? 94 * 56 = ?? 64 * 51 = ?? 58 * 60 = ?? 58 * 54 = ?? 20 * 21 = ?? 6 * 14 = ?? 98 * 34 = ?? 21
* 52 = ?? 61 * 91 = ?? 12 * 61 = ?? 75 * 6 = ?? 24 * 100 = ??
Congratulations, mission 33 has been successfully completed!
```

While you are waiting, a caterpillar crawls by ...

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

```
~/Castle/Main_building/Library
[mission 34] $ 
```

HISTORY AL LIVELLO 33

```
176 ls
177 gsh check
178 gsh goal
179 gsh check
180 gsh reset
181 gsh check
182 gsh reset
183 gsh check
184 gsh goal
185 gsh check
186 gsh reset
187 gsh check
188 gsh goal
189 cd
190 tree -d
191 cd ~/Castle/Main_building/Library/
192 ls
193 cat Mathematics_101
194 COMMAND < Mathematics_101
195 gsh check
196 gsh goal
197 find ~/Castle/Main_building/Library -type f -name "*math*"
198 gsh check
199 gsh check < Mathematics_101
200 history
```

LIVELLO 34

```
| 1 2 3 4 | ↵
[ ] kali@kali: ~
File Actions Edit View Help
grimoire_7352
grimoire_7374
grimoire_770
grimoire_7705
grimoire_8491
grimoire_88
grimoire_9181
grimoire_9356
grimoire_9396

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 34] $ less grimoire_*
grimoire_*: No such file or directory

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 34] $ tree
.
└── ink_and_scroll
    └── inventory.txt

1 directory, 2 files

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 34] $ tree -d
.

0 directories

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 34] $ less inventory.txt

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 34] $ gsh check

Congratulations, mission 34 has been successfully completed!

While you are waiting, a caterpillar crawls by...
+-----+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+-----+
|                                     |

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 35] $ █
```



LIVELLO 35

```
Dispositivi Aiuto
| 1 2 3 4 | █
█
kali㉿kali: ~
File Actions Edit View Help
grep: grimoire_yHnaZFNTytdqUHiGyxfSd: Permission denied
grimoire_ynhZRAQxdCevWRSXywLVK
grep: grimoire_ZLjafbOhpVkJUWTkvRahg: Permission denied

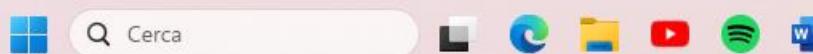
~/Castle/Main_building/Library/Merlin_s_office
[mission 35] $ grep -li "gsh" grimoire_* 2> /dev/null
grimoire_anDZXUCADIfQtdQYWz
grimoire_arfDZBvbEVZeAvsJpVWwKTkpDU
grimoire_axwGduPQXAxLvQbCtBpVaUjmlvHSTTH
grimoire_ByXvhNThCHkPQalqW
grimoire_CUWFvSAZTTgwneUQEWC
grimoire_FJPpkYcStmhoJupuBKIRWanfjZRna
grimoire_GKpODmXsub
grimoire_gsawPiUjZViFVandeZFWSpF
grimoire_GvFbActQXkGjolWJCTE
grimoire_iDwEKctBJhQOdSdKrz
grimoire_IUIWXKUUUXwh0iImgTVTzoYudFuieub
grimoire_jAPxeOmFcoudrLtpOclKkSIa
grimoire_JigOQiHdDQ
grimoire_JoseSJdaDEkojfHrrtvxDDzNfih
grimoire_LMgkuEOIBDfDXZpdkjBfk
grimoire_MjrsAJbEZqiMxGSIIlgHWrM
grimoire_oxZTCrcBfZkMe
grimoire_qjGBsVLKfstgVPRhVUbTVbDuy
grimoire_rh hudlGsWYokPKkMJIic
grimoire_sNIeFEGht
grimoire_TdmwuEZDFHQVD
grimoire_TnaxCSCJxgxeXqXPIxDMKVYtLqBcn
grimoire_TxmqfNkVqKxULPHqzfBFfU
grimoire_UsyUIuqe
grimoire_ynhZRAQxdCevWRSXywLVK

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

Congratulations, mission 35 has been successfully completed!

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

~/Castle/Main_building/Library/Merlin_s_office
[mission 36] $ █
```



CHECK POINT HISTORY AL LIVELLO 35

```
kali㉿kali: ~

File Actions Edit View Help

~/Castle/Main_building/Library/Merlin_s_office
[mission 36] $ history
 1 # START OF COMMANDS HISTORY
 2 gsh goal
 3 pwd
 4 tree -d
 5 cd ~/Castle/Main_Building/Library
 6 cd ~/Castle/Main_building/Library
 7 ls
 8 ls -a
 9 cd Merlin_s_office
10 ls
11 ls -tree
12 tree
13 tree -l
14 tree -l -a
15 tree -ls -a
16 ls -a
17 ls -l
18 ls
19 gsh reset
20 tree
21 gsh goal
22 grep -li "gsh" * 2> /dev/null
23 gsh check
24 gsh reset
25 ls
26 rm inventory.txt
27 ls
28 cd Drawer
29 ls
30 cd ../
31 ls > *grimoire_* ~/Drawer/inventory.txt
32 ls > grimoire_* ~/Drawer/inventory.txt
33 ls > grimoire_* ~/Drawer/inventory.txt
34 ls grimoire_* > ~/Castle/Main_building/Library/Merlin_s_office/Drawer/inventory.txt
35 cat
36 cd /Drawer/
37 cd /Drawer
38 cd Drawer
39 cat inventory.txt
40 less grimoire
41 less grimoire_*
42 ls inventory.txt
43 less grimoire_*
44 cat
45 cat inventory.txt
46 less grimoire_*
47 tree
48 tree -d
```



```
49 less inventory.txt
50 gsh check
51 gsh goal
52 cd ../..
53 ls
54 cd Merlin_s_office
55 ls
56 grep -li gsh
57 grep -li "gsh"
58 grep -li "gsh"*
59 grep -li "gsh"
60 grep -li "gsh" grimoire
61 grep -li "gsh" grimoire_*
62 2 "gsh" grimoire_* > /dev/null
63 2> "gsh" grimoire_* /dev/null
64 ls
65 gsh check
66 grep -li "gsh" grimoire_*
67 cat
68 gsh goal
69 grep -li "gsh"
70 grep -li "gsh" grimoire_*
71*
72 grep -li "gsh" grimoire_*
73 grep -li "gsh" grimoire_* 2> /dev/null
74 gsh check
75 history
```

~/Castle/Main_building/Library/Merlin_s_office
[mission 36] \$ █



Cerca



LIVELLO 36

```
Dispositivi Aiuto
1 2 3 4 | □
File Actions Edit View Help
^C
~/Castle/Observatory
[mission 36] $ ./merlin
~/Castle/Observatory
[mission 36] $ gsh reset
| |
+--+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+--+
| |
~/Castle/Observatory
[mission 36] $ ls
merlin star_chart

~/Castle/Observatory
[mission 36] $ ./merlin
u0FTqHEzJvrbzSERzTCCnTQmRungmXrWlYkuKlmfrfXrFaRnuLSmwp0NjLUWhEDiANbcdxaXfkrTfMALA1KaGSwuRufESnYhrWovdTsuumXYOGdIHszsDjdObShhOHBocZwuaKlhYruncIOBjRvOpONKldIwaqmHchtDrGRjIAduWrNdYWCovUvBSxrTSmgDwnGEOysnLlkHyAYQNjRFDaVraiMRF

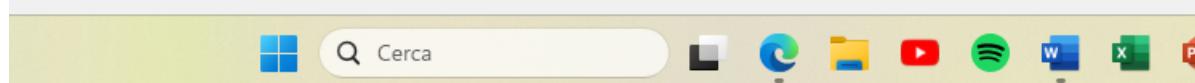
~/Castle/Observatory
[mission 36] $ ./merlin > stdout 2> stderr
~/Castle/Observatory
[mission 36] $ cat stdout
THESECRETKEYISONSTDERR

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

| |
+--+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+--+
| |
~/Castle/Observatory
[mission 37] $ █
```

LIVELLO 37

```
| 1 2 3 4 | □
kali@kali: ~
File Actions Edit View Help
└ Stall
26 directories
~
[mission 37] $ cd ~/Castle/Main_building/Throne_room/
~/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] $ ls -l
total 4
drw-rw-r-- 2 kali kali 4096 Oct 25 10:25 Kings_quarter/
~/Castle/Main_building/Throne_room
[mission 37] $ chmod 777 Kings_quarter
~/Castle/Main_building/Throne_room
[mission 37] $ ls -l
total 4
drwxrwxrwx 2 kali kali 4096 Oct 25 10:25 Kings_quarter/
~/Castle/Main_building/Throne_room
[mission 37] $ cd Kings_quarter/
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 37] $ ls
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 37] $ gsh check
Congratulations, mission 37 has been successfully completed!
+-----+
| Use the command
|   $ gsh help
| to get the list of "gsh" commands.
+-----+
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ █
```



LIVELLO 38

```
1 2 3 4 | ↵
kali@kali: ~
File Actions Edit View Help
total 4
-rw-rw-r-- 1 kali kali 11 Oct 27 09:12 note

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ chmod 777 Kings_quarter
chmod: cannot access 'Kings_quarter': No such file or directory

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ cd note
bash: cd: note: Not a directory

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ cat note
0123456789

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ la -A
note .secret_note

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ chmod 777 .secret_mode
Command 'chamod' not found, did you mean:
  command 'chmod' from deb coreutils
Try: sudo apt install <deb name>

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ chmod 777 .secret_mode
chmod: cannot access '.secret_mode': No such file or directory

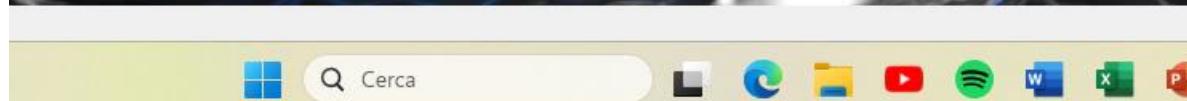
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ chmod 777 .secret_note

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ cat .secret_note
861118899

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 38] $ gsh check
What's the combination to open the King's safe? 861118899

Congratulations, mission 38 has been successfully completed!

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



LIVELLO 39

```
Dispositivi Aiuto
1 2 3 4 | □
kali@kali: ~
File Actions Edit View Help
[mission 39] $ cd Safe
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ ls
crown
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ ls -l crown
total 4
1 kali kali 48 Oct 27 09:18 crown
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ chmod 777 crown
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ ls -l
total 4
-rwxrwxrwx 1 kali kali 48 Oct 27 09:18 crown
~/Castle/Main_building/Throne_room/Safe
[mission 39] $ cat crown
jgs
(^_+_-)
\@*@\@/
{_966_}

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ mv crown ~/Forest/Hut/Chest/

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ gsh cheeck
Error: unknown gsh command 'cheeck'.
Use one of the following commands: check, goal, help, reset

~/Castle/Main_building/Throne_room/Safe
[mission 39] $ gsh check
What are the 3 digits inscribed on the base of the crown? 966

Congratulations, mission 39 has been successfully completed!

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

~/Castle/Main_building/Throne_room/Safe
[mission 40] $ █
```



LIVELLO 40

```
Xispositivi Aiuto
1 2 3 4 | [ ]
[ ] kali@kali: ~
File Actions Edit View Help
└── Cave
    └── Book_of_potions
Stall
1137 directories

~
[mission 40] $ cd ~/Garden/Maze/

~/Garden/Maze
[mission 40] $ find -type f
./fcf12b364b374da81c714d74a/ee5393977c198/4d2d3ad8c0005cc1ba6cfbe5746f3/34602
./fcf12b364b374da81c714d74a/a6d646f59a53107711381f1f0a88d47/6938ca1e425200db1/25508
./321ae02c0e71dad2b7/8f4fa319/78552203b12670f/13779
./86e94a471d7/a0f9e5632cc8af3019fad/0ba341576da7cb9ade4004/64250
./05e28565825e380ffe4df34fc5926a/230cd5c4fb5e394ec6518e017dd3/f162f294e8b925c96/22478
./a37fb2bb80da52e54a90523ff8cf71b/61616f7e62faafa28cee03/55e2c610048b/63337

~/Garden/Maze
[mission 40] $ cat ./fcf12b364b374da81c714d74a/ee5393977c198/4d2d3ad8c0005cc1ba6cfbe5746f3/34602
34602 stone 159c7242f6073c50b468290d7301827c8c9e6d68

~/Garden/Maze
[mission 40] $ cat ./fcf12b364b374da81c714d74a/a6d646f59a53107711381f1f0a88d47/6938ca1e425200db1/25508
25508 stone 2767e1e22bb9b1ba078f649bfe3eceb9f31ce0b4

~/Garden/Maze
[mission 40] $ cat ./321ae02c0e71dad2b7/8f4fa319/78552203b12670f/13779
13779 stone d86622c6d5148c6045395f2b207f6319a10dbc8d

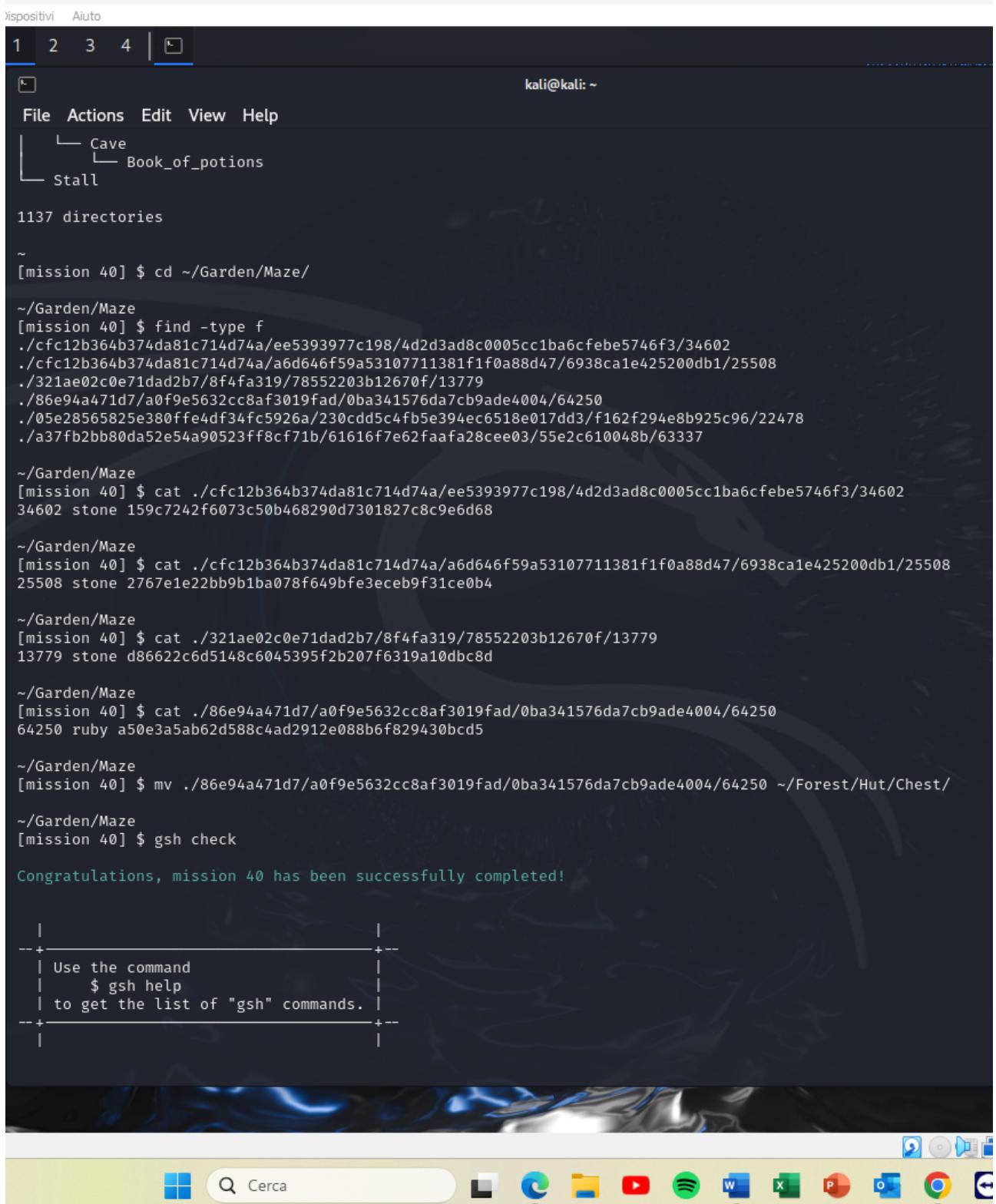
~/Garden/Maze
[mission 40] $ cat ./86e94a471d7/a0f9e5632cc8af3019fad/0ba341576da7cb9ade4004/64250
64250 ruby a50e3a5ab62d588c4ad2912e088b6f829430bcd5

~/Garden/Maze
[mission 40] $ mv ./86e94a471d7/a0f9e5632cc8af3019fad/0ba341576da7cb9ade4004/64250 ~/Forest/Hut/Chest/

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

Congratulations, mission 40 has been successfully completed!

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



HISTORY AL LIVELLO 40

```
kali@kali: ~

File Actions Edit View Help

~/Garden/Maze
[mission 41] $ history
 1 # START OF COMMANDS HISTORY
 2 gsh goal
 3 pwd
 4 tree -d
 5 cs ~/Castle/Observatory/
 6 cd ~/Castle/Observatory/
 7 ls
 8 cd merlin
 9 ls -A
10 ls -l
11 ./merlin
12 ./merlin | grep "secret key"
13 ./merlin | grep "secret key" > key.txt
14 less key.txt
15 ./merlin | grep "secret key" -li
16 ./merlin | grep "secret key" > merlin
17 ls
18 rm key.txt
19 ls
20 ls -a merlin
21 ./merlin
22 ls -hla
23 ./merlin
24 ./merlin
25 ls
26 ./merlin | grep "secret key"
27 gsh reset
28 gsh goal
29 pwd
30 ls
31 ./merlin
32 ls -hla
33 cat merlin
34 GSH_ROOT/missions/stdin_stdout_stderr/05_stdout_stderr_redirection_merlin"

35 ./merlin
36 grep > merlin "secret key"
37 ./merlin
38 gsh reset
39 ls
40 ./merlin
41 ./merlin > stdout 2> stderr
42 cat stdout
43 gsh check < stderr
44 gsh goal
45 pwd
46 cd
```

File Actions Edit View Help

```
44 gsh goal
45 pwd
46 cd
47 tree -d
48 cd ~/Castle/Main_building/Throne_room/
49 ls
50 cd Kings_quarter
51 ls -l
52 chmod 777 Kings_quarter
53 ls -l
54 cd Kings_quarter/
55 ls
56 gsh check
57 gsh goal
58 ls -l
59 chmod 777 Kings_quarter
60 cd note
61 cat note
62 la -A
63 chmod 777 .secret_mode
64 chmod 777 .secret_mode
65 chmod 777 .secret_note
66 cat .secret_note
67 gsh check
68 gsh goal
69 cd ../
70 ls
71 cs Safe
72 cd safe
73 cd Safe
74 ls -l
75 chmod 777 Safe
76 ls -l
77 cd Safe
78 ls
79 ls -l crown
80 chmod 777 crown
81 ls -l
82 cat crown
83 mv crown ~/Forest/Hut/Chest/
84 gsh cheeck
85 gsh check
86 gsh goal
87 cd ../../..
88 cd ../
89 tree -d
90 cd ../
91 tree -d
92 cd ~/Garden/Maze/
93 find -type f
94 cat ./cfc12b364b374da81c714d74a/ee5393977c198/4d2d3ad8c0005cc1ba6cfebe5746f3/34602
```

```
94 cat ./cfc12b364b374da81c714d74a/ee5393977c198/4d2d3ad8c0005cc1ba6cfebe5746f3/34602
95 cat ./cfc12b364b374da81c714d74a/a6d646f59a53107711381f1f0a88d47/6938ca1e425200db1/25508
96 cat ./321ae02c0e71dad2b7/8f4fa319/78552203b12670f/13779
97 cat ./86e94a471d7/a0f9e5632cc8af3019fad/0ba341576da7cb9ade4004/64250
98 mv ./86e94a471d7/a0f9e5632cc8af3019fad/0ba341576da7cb9ade4004/64250 ~/Forest/Hut/Chest/
99 gsh check
100 history
~/Garden/Maze
[mission 41] $
```



LIVELLO 41

The screenshot shows a terminal window on a Kali Linux desktop. The terminal title is "kali@kali: ~". The session details the completion of mission 41, involving file manipulation and command execution. The terminal output is as follows:

```
1 2 3 4 | ↻
File Actions Edit View Help
~/Garden/Maze
[mission 41] $ ls
0d461f4f6939a751918542/ 3fceea5fa4c5bfd9a1a6663fa84ad4/ 58c9253cce9a2a9/ de2c861b8f584894827ac3aa/
0da61142b4b/ 5428b5ddc43a4e29/ 683f8a5369ca7a75832ff360135a40/
3226b330d9bd494186eb9ae2a05/ 54cf830ed945fe3e84e6a801737/ b2232799371/

~/Garden/Maze
[mission 41] $ find . -type f | xargs grep "diamond"
./b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18:3d7442687ab3b6d18 diamond fbbd206ddac071647d92cb20ffe2beb2
de907d59

~/Garden/Maze
[mission 41] $ mv ./b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18:3d7442687ab3b6d18 diamond fbbd206ddac071647d92cb20ffe2beb2
de907d59 ~/Forest/Hut/Chest/
mv: cannot stat './b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18:3d7442687ab3b6d18': No such file or directory
mv: cannot stat 'diamond': No such file or directory
mv: cannot stat 'fbbd206ddac071647d92cb20ffe2beb2de907d59': No such file or directory

~/Garden/Maze
[mission 41] $ find . -type f | xargs grep "diamond"
./b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18:3d7442687ab3b6d18 diamond fbbd206ddac071647d92cb20ffe2beb2
de907d59

~/Garden/Maze
[mission 41] $ ls
0d461f4f6939a751918542/ 3fceea5fa4c5bfd9a1a6663fa84ad4/ 58c9253cce9a2a9/ de2c861b8f584894827ac3aa/
0da61142b4b/ 5428b5ddc43a4e29/ 683f8a5369ca7a75832ff360135a40/
3226b330d9bd494186eb9ae2a05/ 54cf830ed945fe3e84e6a801737/ b2232799371/

~/Garden/Maze
[mission 41] $ find . -type f | xargs grep -l "diamond"
./b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18

~/Garden/Maze
[mission 41] $ mv ./b2232799371/5f6b9f4e5e0b7fddc7099ff0506bf53/3d7442687ab3b6d18 ~/Forest/Hut/Chest/

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

Congratulations, mission 41 has been successfully completed!
```

The terminal window is part of a desktop environment, with a taskbar at the bottom showing various application icons.

LIVELLO 42

1 2 3 4 |

kali@kali: ~

File Actions Edit View Help

(9)
~/Stall
[mission 42] \$ gsh check
How much does the king owe? 21
That's the right answer, but you used 9 commands!

Sorry, mission 42 hasn't been completed.

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

(0)
~/Stall
[mission 42] \$ ls | xargs grep "King"
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a horse for 6 coppers -- PAID.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought an opal for 2 coppers -- PAID.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a wooden spoon for 5 coppers -- PAID.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a goat for 4 coppers -- PAID.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a spade for 4 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a goat for 5 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a cow for 6 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a piece of soap for 6 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a blanket for 2 coppers -- PAID.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a shiny rock for 2 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a bottle of cider for 2 coppers.
7e20a00f05fd_s_c_r_o_l_l_7e20a00f05fd5fe6:the King bought a chicken for 3 coppers -- PAID.
(1)
~/Stall
[mission 42] \$ gsh check
How much does the king owe? 25

Congratulations, mission 42 has been successfully completed!

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

(0)
~/Stall
[mission 43] \$

LIVELLO 43

LIVELLO 45 (mi sono dimenticato di fare lo screen del Livello 44...)

VM VirtualBox

Dispositivi Aiuto

| 1 2 3 4 |

kali@kali: ~

File Actions Edit View Help

it re-appear is: wbjs
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?
wbjs

Congratulations, mission 44 has been successfully completed!

CONGRATULATIONS!

You have finished all the missions.

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

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 45] \$

Cerca

HISTORY AL LIVELLO 45

VM VirtualBox

Dispositivi Aiuto

1 2 3 4 |

kali@kali: ~

File Actions Edit View Help

```
112 pwd
113 tree -d
114 cd ~/stall
115 cd ~/Stall
116 ls
117 gsh goal
118 ls | xargs grep "king"
119 grep "King"
120 ls | xargs grep "King"
121 gsh check
122 ls | xargs grep "King"
123 gsh check
124 gsh goal
125 ls | xargs grep -v "PAID" | wc -l
126 gsh check
127 gsh goal
128 cd
129 pwd
130 tree -d
131 cd ~/Castle/Main_building/Library/Merlin_s_office/
132 ls
133 ls -a
134 cd Drawer
135 ls
136 cat secret_message
137 tr 'a-z' 'l-za-k' < secret_message
138 tr 'a-z' 'm-za-l' < secret_message
139 tr 'a-z' 'n-za-m' < secret_message
140 tr 'a-z' 'n-za-m' < secret_message
141 tr 'a-z' 'o-za-n' < secret_message
142 tr 'a-z' 'p-za-o' < secret_message
143 tr 'a-z' 'q-za-p' < secret_message
144 tr 'a-z' 'r-za-q' < secret_message
145 tr 'a-z' 's-za-r' < secret_message
146 tr 'a-z' 'm-za-j' < secret_message
147 tr 'a-z' 'n-za-l' < secret_message
148 tr 'a-z' 'n-za-m' < secret_message
149 tr 'a-z' 'o-za-n' < secret_message
150 tr 'a-z' 'p-za-o' < secret_message
151 gsh reset
152 ls
153 cat secret_message
154 tr 'a-z' 'k-za-j' < secret_message
155 tr 'a-z' 'l-za-k' < secret_message
156 tr 'a-z' 'm-za-l' < secret_message
157 tr 'a-z' 'n-za-m' < secret_message
158 gsh check
159 history
```

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 45] \$ █

Cerca

File Icons

SELFIE – LIVELLO 45

