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[Prova pratica finale M2]

EPICODE - CYBERSECURITY CLASS [W5D4 Pratica]

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Nel progetto di fine Modulo 2, ci viene chiesto di installare gameshell.sh da repository GitHub direttamente sul terminale Kali, di avviare con comando bash gameshell.sh il gioco e di proseguire a svolgere le missioni proposte fino a quando possibile.

SPOILER: ho completato tutte le missioni tranne la n.13, che non parte perché manca un componente che sospetto non sia stato ben installato durante la procedura di scaricamento e copia da GitHub.

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 43] $ gsh index
 1 basic/01_cd_tower (completed)
 2 basic/02_cd__cellar (completed)
 3 basic/03_cd_HOME_throne (completed)
 4 basic/04_mkdir_chest (completed)
 5 basic/05_rm_spiders_cellar (completed)
 6 basic/06_mv_coins_garden (completed)
 7 basic/07_mv_hidden_coins_garden (completed)
 8 basic/08_rm_wildcard_spiders_cellar (completed)
 9 basic/09_rm_wildcard_hidden_spiders_cellar (completed)
10 basic/10_cp_standard_great_hall (completed)
11 basic/11_cp_wildcards_tapestries_great_hall (completed)
12 basic/12_cp_ls_mtime_paintings_tower (completed)
13 misc/01_cal_nostradamus (cancelled)
14 intermediate/01_alias_la (completed)
15 misc/02.nano_journal (completed)
16 intermediate/02_alias_journal (completed)
17 intermediate/03_tab_spider_lair (completed)
18 intermediate/04_bg_xeyes (completed)
19 finding_files_maze/01_ls_cd (completed)
20 finding_files_maze/02_tree (completed)
21 finding_files_maze/03_find_1 (completed)
22 pipe_intro_book_of_potions/01_head (completed)
23 pipe_intro_book_of_potions/02_tail (completed)
24 pipe_intro_book_of_potions/03_cat (completed)
25 pipe_intro_book_of_potions/04_pipe (completed)
26 pipe_intro_book_of_potions/05_pipe_head_tail (completed)
27 processes/01_ps_kill (completed)
28 processes/02_ps_kill_signal (completed)
29 processes/03_pstree_kill (completed)
30 stdin_stdout_stderr/01_stdin_additions (completed)
31 stdin_stdout_stderr/02_stdin_redirection_multiplications (completed)
32 stdin_stdout_stderr/03_stdout_redirection_inventory (completed)
33 stdin_stdout_stderr/04_stdout_dev-null_grimoires (completed)
34 stdin_stdout_stderr/05_stdout_stderr_redirection_merlin (completed)
35 permissions/01_chmod_x_dir_king_quarter (completed)
36 permissions/02_chmod_r_file_king_quarter (completed)
37 permissions/03_chmod_rw_file_dir_throne_room (completed)
38 finding_files_maze/04_find_2 (completed)
39 finding_files_maze/05_find_xargs_grep (completed)
40 pipes_merchant_stall/01_pipe_1 (completed)
41 pipes_merchant_stall/02_pipe_2 (completed)
42 misc/03_tr_caesar_shift (completed)
→ 43 FINAL_MISSION
```

Procederò a illustrare il mio operato limitandomi a inserire gli screen di obiettivo e risoluzione delle varie mission, poiché spiegare 42 missioni sarebbe davvero troppo lungo...

MISSIONE 1

Mission goal

Go to the top of the main tower of the castle.

```
bash: cd: castle: No such file or directory
[mission 1] $ ls
Castle Forest Garden Mountain Stall
[mission 1] $ pwd
/home/kali/gameshell/World
[mission 1] $ ls
Castle Forest Garden Mountain Stall
[mission 1] $ cd Castle
[mission 1] $ ls
Cellar Great_hall Main_building Main_tower Observatory
[mission 1] $ cd Main_tower
[mission 1] $ ls
First_floor
[mission 1] $ cd First_floor
[mission 1] $ ls
Second_floor
[mission 1] $ cd Second_floor
[mission 1] $ ls
Top_of_the_tower
[mission 1] $ cd Top_of_the_tower
[mission 1] $ ls
[mission 1] $ gsh check
```

Congratulations, mission 1 has been successfully completed!

MISSIONE 2

Mission goal

Go the castle's cellar.

```
[mission 2] $ pwd  
/home/kali/gameshell/World/Castle/Cellar  
[mission 2] $ gsh check
```

Congratulations, mission 2 has been successfully completed!

MISSIONE 3

Mission goal

Go back to the starting location and then go to the throne room using only two commands.

```
[mission 3] $ pwd  
/home/kali/gameshell/World  
[mission 3] $ cd  
[mission 3] $ cd /home/kali/gameshell/World/Castle/Main_building/Throne_room  
[mission 3] $ gsh check
```

Congratulations, mission 3 has been successfully completed!

MISSIONE 4

Mission goal

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

```
[mission 4] $ mkdir Hut  
  
~/Forest  
[mission 4] $ ls  
Hut  
  
~/Forest  
[mission 4] $ cd Hut  
  
~/Forest/Hut  
[mission 4] $ mkdir Chest  
  
~/Forest/Hut  
[mission 4] $ pwd  
/home/kali/gameshell/World/Forest/Hut  
  
~/Forest/Hut  
[mission 4] $ ls  
Chest  
  
~/Forest/Hut  
[mission 4] $ gsh check  
  
Congratulations, mission 4 has been successfully completed!
```

MISSIONE 5

Mission goal

Go back to the cellar and get rid of all the spiders. Leave the bats alone: they appear on the castle's coat of arms and are said to confer luck.

```
~/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] $ rm spider_2  
  
~/Castle/Cellar  
[mission 5] $ rm spider_3  
  
~/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 6

```
| 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 your hut in the forest.
```

```
~  
[mission 6] $ cd Garden  
  
~/Garden  
[mission 6] $ ls  
Flower_garden  Maze  Shed  coin_1  coin_2  coin_3  
  
~/Garden  
[mission 6] $ mv -v coin_1 coin_2 coin_3 /home/kali/gameshell/World/Forest/Hut/Chest  
renamed 'coin_1' → '/home/kali/gameshell/World/Forest/Hut/Chest/coin_1'  
renamed 'coin_2' → '/home/kali/gameshell/World/Forest/Hut/Chest/coin_2'  
renamed 'coin_3' → '/home/kali/gameshell/World/Forest/Hut/Chest/coin_3'  
  
~/Garden  
[mission 6] $ gsh check  
  
Congratulations, mission 6 has been successfully completed!
```

MISSIONE 7

(manca screen me ne sono dimenticata)

```
~  
[mission 7] $ cd Garden  
  
~/Garden  
[mission 7] $ ls -a  
.  ..  .18798_coin_1  .30655_coin_3  .50231_coin_2  Flower_garden  Maze  Shed  
  
~/Garden  
[mission 7] $ mv .18798_coin_1  .30655_coin_3  .50231_coin_2 /home/kali/gameshell/World/Forest/Hut/Chest  
  
~/Garden  
[mission 7] $ gsh check  
  
Congratulations, mission 7 has been successfully completed!
```

MISSIONE 8

```
) Mission goal  
=====  
)  
Get rid of all the spiders that are crawling in the cellar. Again, do not do  
not disturb the bats.  
)
```

```
removed '21669_spider_41'  
removed '22680_spider_42'  
removed '22871_spider_18'  
removed '23274_spider_15'  
removed '23723_spider_11'  
removed '24021_spider_49'  
removed '24635_spider_9'  
removed '25180_spider_45'  
removed '2620_spider_25'  
removed '26267_spider_20'  
removed '2649_spider_24'  
removed '26679_spider_22'  
removed '28539_spider_43'  
removed '28820_spider_12'  
removed '28939_spider_2'  
removed '30387_spider_5'  
removed '31050_spider_37'  
removed '31170_spider_21'  
removed '3168_spider_7'  
removed '32337_spider_40'  
removed '3386_spider_13'  
removed '3962_spider_44'  
removed '4128_spider_28'  
removed '5283_spider_38'  
removed '6946_spider_32'  
removed '7558_spider_36'  
removed '757_spider_10'  
removed '799_spider_30'  
removed '8463_spider_46'  
  
~/Castle/Cellar  
[mission 8] $ gsh check  
Congratulations, mission 8 has been successfully completed!
```

```
~/Castle/Cellar  
[mission 8] $ ls -a  
.  
..  
14092_spider_4  
14107_bat_4  
1118_spider_26  
11429_spider_27  
12075_spider_31  
12433_spider_19  
12433_spider_48  
12600_spider_47  
13599_bat_5  
13928_spider_14  
17839_spider_6  
19377_spider_1  
14120_spider_17  
19552_bat_3  
14749_spider_16  
19555_spider_33  
14944_spider_35  
15256_bat_1  
16343_spider_39  
16393_spider_3  
16664_spider_8  
1754_spider_23  
23274_spider_15  
23723_spider_11  
24021_spider_49  
24635_spider_9  
25092_spider_34  
25180_spider_45  
21446_spider_29  
25479_bat_2  
21515_spider_50  
2620_spider_25  
21669_spider_41  
26267_spider_20  
22680_spider_42  
2649_spider_24  
22871_spider_18  
26679_spider_22  
28539_spider_43  
28820_spider_12  
28939_spider_2  
30387_spider_5  
31050_spider_37  
31170_spider_21  
757_spider_10  
799_spider_30  
8463_spider_46  
barrel_of_apples  
3386_spider_13  
3962_spider_44  
  
~/Castle/Cellar  
[mission 8] $ rm -v *_spider_*  
removed '1118_spider_26'  
removed '11429_spider_27'  
removed '12075_spider_31'  
removed '12433_spider_19'  
removed '12433_spider_48'  
removed '12600_spider_47'  
removed '13928_spider_14'  
removed '14092_spider_4'  
removed '14120_spider_17'  
removed '14749_spider_16'  
removed '14944_spider_35'  
removed '16343_spider_39'  
removed '16393_spider_3'  
removed '16664_spider_8'  
removed '1754_spider_23'
```

MISSIONE 9

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.

```
~/Castle/Cellar
[mission 9] $ pwd
/home/kali/gameshell/World/Castle/Cellar

~/Castle/Cellar
[mission 9] $ ls -a
. .1494_spider_49 .19639_spider_39 .24914_spider_7 .29490_spider_44 .9529_spider_34
.. .1504_spider_33 .20652_spider_25 .25405_spider_18 .2966_spider_38 .9539_spider_27
.10762_bat_5 .1646_spider_22 .21144_spider_46 .25692_spider_20 .30042_spider_6 13599_bat_5
.10936_spider_37 .16494_spider_2 .21793_spider_16 .25877_spider_10 .30477_spider_3 14107_bat_4
.11339_spider_11 .16561_spider_15 .21865_spider_23 .25981_spider_24 .30594_spider_50 15256_bat_1
.12591_bat_4 .17593_spider_5 .22642_spider_31 .26154_spider_47 .30743_spider_13 19552_bat_3
.12667_spider_17 .17634_spider_43 .23391_spider_19 .26485_spider_48 .32262_spider_29 25479_bat_2
.12872_spider_45 .17872_spider_8 .24330_spider_26 .27382_spider_36 .32664_spider_32 barrel_of_apples
.12876_bat_3 .18403_spider_4 .24452_spider_40 .28687_spider_9 .5705_spider_1
.13058_spider_14 .185_spider_35 .24493_spider_21 .28940_bat_1 .7407_spider_12
.13611_spider_30 .19162_bat_2 .24587_spider_28 .28953_spider_42 .8071_spider_41

~/Castle/Cellar
[mission 9] $ rm -v .*_spider_*
removed '.10936_spider_37'
removed '.11339_spider_11'
removed '.12667_spider_17'
removed '.12872_spider_45'
removed '.13058_spider_14'
removed '.13611_spider_30'
removed '.1494_spider_49'
removed '.1504_spider_33'
removed '.1646_spider_22'
removed '.16494_spider_2'
removed '.16561_spider_15'
removed '.17593_spider_5'
removed '.17634_spider_43'

removed '.21869_spider_23'
removed '.22642_spider_31'
removed '.23391_spider_19'
removed '.24330_spider_26'
removed '.24452_spider_40'
removed '.24493_spider_21'
removed '.24587_spider_28'
removed '.24914_spider_7'
removed '.25405_spider_18'
removed '.25692_spider_20'
removed '.25877_spider_10'
removed '.25981_spider_24'
removed '.26154_spider_47'
removed '.26485_spider_48'
removed '.27382_spider_36'
removed '.28687_spider_9'
removed '.28953_spider_42'
removed '.29490_spider_44'
removed '.2966_spider_38'
removed '.30042_spider_6'
removed '.30477_spider_3'
removed '.30594_spider_50'
removed '.30743_spider_13'
removed '.32262_spider_29'
removed '.32664_spider_32'
removed '.5705_spider_1'
removed '.7407_spider_12'
removed '.8071_spider_41'
removed '.9529_spider_34'
removed '.9539_spider_27'

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

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

MISSIONE 10

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.

```
~/Castle/Great_hall
[mission 10] $ ls -hl
total 28K
-rw-r--r-- 1 kali kali 229 Dec 16 18:04 31711_stag_head
-rw-r--r-- 1 kali kali 1.1K Dec 16 18:04 4018_suit_of_armour
-rw-r--r-- 1 kali kali 417 Dec 16 18:04 61468_decorative_shield
-rw-r--r-- 1 kali kali 47 Dec 16 18:04 standard_1
-rw-r--r-- 1 kali kali 47 Dec 16 18:04 standard_2
-rw-r--r-- 1 kali kali 47 Dec 16 18:04 standard_3
-rw-r--r-- 1 kali kali 47 Dec 16 18:04 standard_4

~/Castle/Great_hall
[mission 10] $ cp -v standard* /home/kali/gameshell/World/Forest/Hut/Chest
'standard_1' → '/home/kali/gameshell/World/Forest/Hut/Chest/standard_1'
'standard_2' → '/home/kali/gameshell/World/Forest/Hut/Chest/standard_2'
'standard_3' → '/home/kali/gameshell/World/Forest/Hut/Chest/standard_3'
'standard_4' → '/home/kali/gameshell/World/Forest/Hut/Chest/standard_4'

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

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

MISSIONE 11

Mission goal

The tapestries in the castle's great hall are also particularly beautiful. Put a copy of each in your chest.

```
~/Castle/Great_hall
[mission 11] $ cp -v *_tapestry_* /home/kali/gameshell/World/Forest/Hut/Chest
'21870_tapestry_04' → '/home/kali/gameshell/World/Forest/Hut/Chest/21870_tapestry_04'
'2387_tapestry_05' → '/home/kali/gameshell/World/Forest/Hut/Chest/2387_tapestry_05'
'31308_tapestry_02' → '/home/kali/gameshell/World/Forest/Hut/Chest/31308_tapestry_02'
'35659_tapestry_10' → '/home/kali/gameshell/World/Forest/Hut/Chest/35659_tapestry_10'
'52419_tapestry_01' → '/home/kali/gameshell/World/Forest/Hut/Chest/52419_tapestry_01'
'57792_tapestry_08' → '/home/kali/gameshell/World/Forest/Hut/Chest/57792_tapestry_08'
'59019_tapestry_09' → '/home/kali/gameshell/World/Forest/Hut/Chest/59019_tapestry_09'
'60032_tapestry_03' → '/home/kali/gameshell/World/Forest/Hut/Chest/60032_tapestry_03'
'6787_tapestry_07' → '/home/kali/gameshell/World/Forest/Hut/Chest/6787_tapestry_07'
'9672_tapestry_06' → '/home/kali/gameshell/World/Forest/Hut/Chest/9672_tapestry_06'

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

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

MISSIONE 12

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.

```
~/Castle/Main_tower/First_floor
[mission 12] $ cp -v painting_aWJRNXKH /home/kali/gameshell/World/Forest/Hut/Chest
'painting_aWJRNXKH' → '/home/kali/gameshell/World/Forest/Hut/Chest/painting_aWJRNXKH'

~/Castle/Main_tower/First_floor
[mission 12] $ gsh check

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

The command 'cal' is required for mission misc/01_cal_nostradamus/init.sh.
(Debian / Ubuntu: install package 'bsdmainutils')
Error: mission 13 is cancelled because some dependencies are not met.

MISSIONE 14

```
Mission goal  
=====  
  
Checking for hidden files is taking too long!  
  
Create an alias "la" to run the command ``ls -A`` in order to list all files,  
including hidden ones, with only 2 letters.  
  
Define the synonym  
  
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.
```

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

MISSIONE 15

```
| Mission goal  
| _____  
| Create a file named "journal.txt" in your chest and write a short message in  
| it.  
| You can use this file to record your notes and solutions for the upcoming  
| missions.  
|
```

```
~/Castle/Main_tower/First_floor  
[mission 15] $ nano ~/Forest/Hut/Chest/journal.txt  
  
~/Castle/Main_tower/First_floor  
[mission 15] $ gsh check  
  
Congratulations, mission 15 has been successfully completed!
```

MISSIONE 16

```
Mission goal  
_____
```

```
Create an alias "journal" in order to easily edit your journal file wherever  
you are.
```

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

MISSIONE 17

```
~/Castle/Cellar
[mission 17] $ la
.10762_bat_5 .19162_bat_2
.12591_bat_4 .28940_bat_1
.12876_bat_3 .Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni/ 13599_bat_5 19552_bat_3
14107_bat_4 25479_bat_2
15256_bat_1 barrel_of_apples

~/Castle/Cellar
[mission 17] $ cd .Lair_of_the_spider_queen\ QZEpgoejzUMCQsfH NZFwWmqieleIWdni/

~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 17] $ la
gFOULYuQQoLRhTKP_baby_bat_IsHCLRUBTVsLINGf hHT00kZqCEhqYZHb_spider_queen_CnEjNnEvacPCwyEC

~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 17] $ rm hHT00kZqCEhqYZHb_spider_queen_CnEjNnEvacPCwyEC

~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 17] $ gc
Perfect, it took you only 19 seconds to complete this mission!

Congratulations, mission 17 has been successfully completed!
```

MISSIONE 18

```
\_ | Mission goal
| =====
|
| As you are walking around the castle, you feel like you are being watched ...
| Turn your head quickly enough and you may see one of the paintings' eyes
| following you.
|
| 1/ Run the ``xeyes`` command, and stop it.
| 2/ Run the ``xeyes`` command in the background.
```

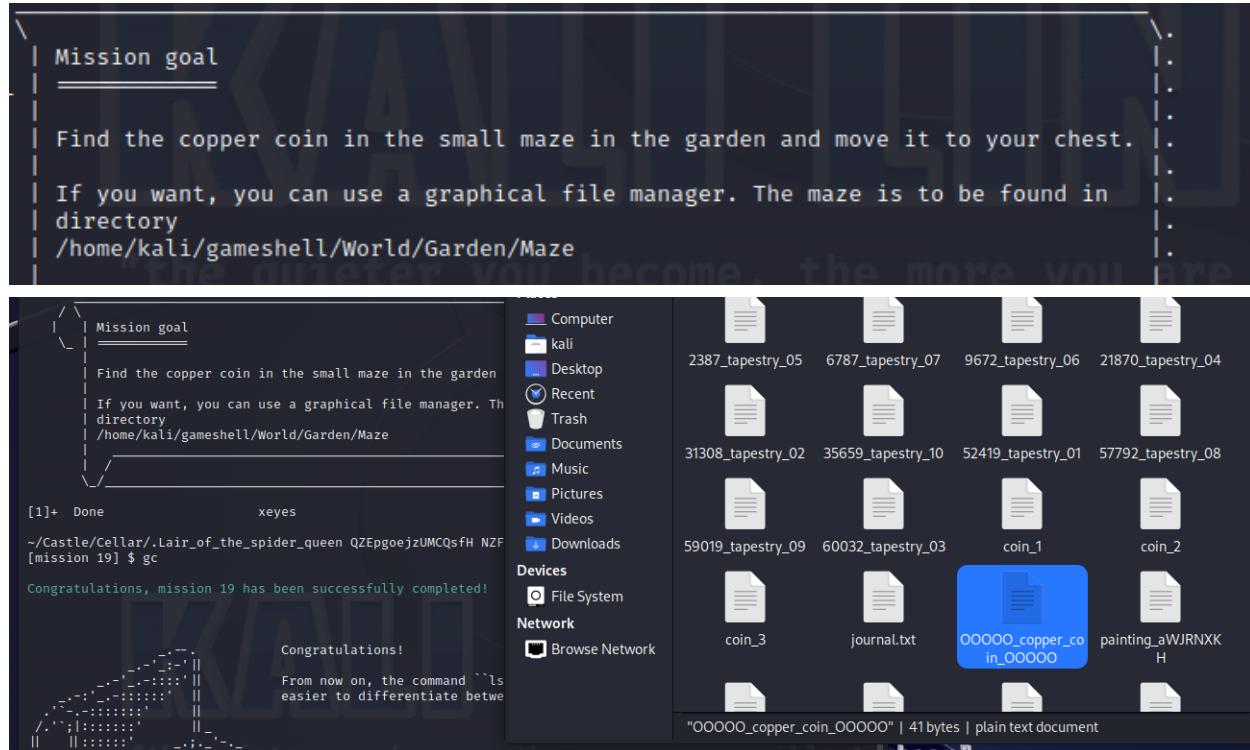
```
~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 18] $ xeyes
^C

~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 18] $ xeyes &
[1] 72371

~/Castle/Cellar/.Lair_of_the_spider_queen QZEpgoejzUMCQsfH NZFwWmqieleIWdni
[mission 18] $ gc

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

MISSIONE 19



MISSIONE 20

```
07858/f4
└── 7e4a7374b9d02884dd376
    ├── 39a7e4dee8fbfaea8556457f29
    ├── 8c6b4ae2d9ccc2086b781
    └── d274a8a2fd3
        b50636fffb5cc60dddf35
            ├── 1073b701a5b1d231525b7dd3cb
            └── 2dfadf7fdedbc4
                9d5b1a345

40 directories, 1 file

~/Garden/Maze
[mission 20] $

~/Garden/Maze
[mission 20] $ mv -v */**/*00000_silver_coin_00000 ~/Forest/Hut/Chest
mv: cannot stat '*/**/*00000_silver_coin_00000': No such file or directory

~/Garden/Maze
[mission 20] $ mv -v */**/*00000_silver_coin_00000 ~/Forest/Hut/Chest
renamed 'c4338703c252ba38/4a806ac146a910b20d3bf286655c/9a930c79de/00000_silver_coin_00000' → '/home/kali/gam
eshell/World/Forest/Hut/Chest/00000_silver_coin_00000'

~/Garden/Maze
[mission 20] $ gc

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

MISSIONE 21

```
| Mission goal
| =====
|
| Find the gold coins in the maze hidden in the garden and move them to your
| chest.
|
~/Garden/Maze
[mission 21] $ mv ./a0c0bcb049f57b20d78222c12f9086/5c12528aaa7f962507d40f326a1c93/7d959e4be8c46418ba41/gold_co
in_1 ~/Forest/Hut/Chest
~/Garden/Maze
[mission 21] $ mv ./a0c0bcb049f57b20d78222c12f9086/ee739df9d24c01072/2229c82cac4122/Gold_CoIN_2 ~/Forest/Hut/C
hest
~/Garden/Maze
[mission 21] $ gc
Congratulations, mission 21 has been successfully completed!
```

MISSIONE 22

```
| 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.
```

```
~/Mountain/Cave
[mission 22] $ cd Book_of_potions

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

~/Mountain/Cave/Book_of_potions
[mission 22] $ cp page_07 ~/Mountain/Cave

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

~/Mountain/Cave
[mission 22] $ head -6 page_07
Herbal tea
_____
1) Boil water.
2) Add herbs from the forest.
3) Let it sit for five minutes and drink while hot.

~/Mountain/Cave
[mission 22] $ gc

Congratulations, mission 22 has been successfully completed!
```

MISSIONE 23

```
~/Mountain/Cave
[mission 23] $ tail -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 23] $ gc

Congratulations, mission 23 has been successfully completed!

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

MISSIONE 24

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.

```
~/Mountain/Cave
```

```
[mission 24] $ 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 24] $ gc
```

Congratulations, mission 24 has been successfully completed!

MISSIONE 25

```
| 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.
```

```
~/Mountain/Cave  
[mission 25] $ cd Book_of_potions  
  
~/Mountain/Cave/Book_of_potions  
[mission 25] $ cp page_03 page_04 ~/Mountain/Cave  
  
~/Mountain/Cave/Book_of_potions  
[mission 25] $ cd -  
/home/kali/gameshell/World/Mountain/Cave  
  
~/Mountain/Cave  
[mission 25] $ cat page_03 page_04 | tail -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 25] $ gc  
  
Congratulations, mission 25 has been successfully completed!
```

MISSIONE 26

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.

```
~/Mountain/Cave
[mission 26] $ head -6 page_13 | tail -3
1) Boil water in a big pot.
2) Condense the vapor in a fresh container.
3) Add minerals for a better taste (optional).
```

```
~/Mountain/Cave
[mission 26] $ gc
```

Congratulations, mission 26 has been successfully completed!

MISSIONE 27

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.

```
ps
  PID TTY      TIME CMD
1336 pts/0    00:00:00 zsh
1464 pts/0    00:00:00 bash
1643 pts/0    00:00:00 bash
1989 pts/0    00:00:00 spell
2505 pts/0    00:00:00 ps

~
[mission 27] $ *#@*
&_**/~
!$-#kill 1989
*#@*
&_**/~
!$-# [1]+  Terminated                  "$GSH_TMP/$(gettext "spell"))"
~
[mission 27] $ gc
Congratulations, mission 27 has been successfully completed!
```

MISSIONE 28

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.

```
[mission 28] $ ps
  PID TTY      TIME CMD
 1336 pts/0    00:00:00 zsh
 1464 pts/0    00:00:00 bash
 1643 pts/0    00:00:00 bash
 12152 pts/0    00:00:00 spell
 14227 pts/0    00:00:00 spell
 14251 pts/0    00:00:00 ps

[mission 28] $ ki
          *#@*
&_**/~
!$-# 

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

KILL 12152 14227

[mission 28] $ gc
Congratulations, mission 28 has been successfully completed!
```

MISSIONE 29

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!

```
removed '23579_coal'
removed '2_coal'
removed '30168_coal'
removed '30258_coal'
removed '3026_coal'
removed '3185_coal'
removed '3186_coal'
removed '37206_coal'
removed '40231_coal'
removed '41061_coal'
removed '41998_coal'
removed '44075_coal'
removed '45268_coal'
removed '49692_coal'
removed '53874_coal'
removed '55199_coal'
removed '56749_coal'
removed '5700_coal'
removed '57486_coal'
removed '61082_coal'
removed '6833_coal'

~/Castle/Cellar
[mission 29] $ gc

Congratulations, mission 29 has been successfully completed!
```

MISSIONE 30

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

~/Castle/Cellar
[mission 30] $ gsh check
91 + 52 = ?? 143
46 + 32 = ?? 78
39 + 83 = ?? 122
97 + 24 = ?? 121
49 + 60 = ?? 109

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

MISSIONE 31

Mission goal

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

Get ready, because Merlin is about to test you speed with products.

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

Remark

There now is a time constraint.

Hint

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

```
~/Castle
[mission 31] $ cd Main_building
~/Castle/Main_building
[mission 31] $ cd Library
~/Castle/Main_building/Library
[mission 31] $ ls
Greek_Latin_and_other_modern_languages Mathematics_101 Merlin_s_office/
~/Castle/Main_building/Library
[mission 31] $ gc < Mathematics_101
17 * 18 = ?? 90 * 13 = ?? 49 * 32 = ?? 14 * 15 = ?? 56 * 59 = ?? 91 * 2 = ?? 35 * 70 = ?? 22 * 36 = ?? 40 * 8
6 = ?? 74 * 49 = ?? 45 * 63 = ?? 19 * 75 = ?? 12 * 64 = ?? 13 * 93 = ?? 48 * 59 = ?? 15 * 76 = ?? 69 * 97 = ?
? 59 * 19 = ?? 96 * 42 = ?? 77 * 73 = ?? 83 * 4 = ?? 34 * 16 = ?? 97 * 70 = ?? 96 * 43 = ?? 37 * 39 = ?? 60 *
37 = ?? 21 * 61 = ?? 80 * 43 = ?? 59 * 72 = ?? 17 * 42 = ?? 68 * 10 = ?? 33 * 91 = ?? 49 * 27 = ?? 81 * 46 =
?? 37 * 91 = ?? 84 * 73 = ?? 86 * 36 = ?? 68 * 79 = ?? 85 * 36 = ?? 34 * 10 = ?? 13 * 38 = ?? 2 * 34 = ?? 49 *
* 50 = ?? 55 * 55 = ?? 97 * 54 = ?? 83 * 11 = ?? 85 * 93 = ?? 86 * 100 = ?? 60 * 79 = ?? 49 * 30 = ?? 49 * 1
5 = ?? 97 * 9 = ?? 32 * 92 = ?? 61 * 69 = ?? 1 * 90 = ?? 54 * 3 = ?? 89 * 67 = ?? 31 * 90 = ?? 75 * 66 = ?? 4
* 56 = ?? 68 * 23 = ?? 16 * 38 = ?? 87 * 30 = ?? 48 * 44 = ?? 92 * 26 = ?? 10 * 49 = ?? 12 * 76 = ?? 92 * 93
= ?? 93 * 32 = ?? 44 * 80 = ?? 38 * 5 = ?? 51 * 35 = ?? 57 * 93 = ?? 99 * 79 = ?? 53 * 60 = ?? 75 * 96 = ?
86 * 26 = ?? 68 * 19 = ?? 64 * 38 = ?? 52 * 56 = ?? 90 * 90 = ?? 72 * 33 = ?? 20 * 17 = ?? 10 * 78 = ?? 89 *
53 = ?? 79 * 51 = ?? 18 * 8 = ?? 21 * 44 = ?? 67 * 44 = ?? 22 * 82 = ?? 84 * 6 = ?? 77 * 85 = ?? 32 * 6 = ?
69 * 32 = ?? 18 * 53 = ?? 6 * 40 = ?? 12 * 80 = ?? 24 * 14 = ?? 31 * 87 = ?? 6 * 38 = ??
```

Congratulations, mission 31 has been successfully completed!

While you are waiting, a bat flies by ...

MISSIONE 32

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 ...

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 32] $ ls
ink_and_scroll

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 32] $ cd -
/home/kali/gameshell.1/World/Castle/Main_building/Library/Merlin_s_office

~/Castle/Main_building/Library/Merlin_s_office
[mission 32] $ ls grimoire_* > Drawer/inventory.txt

~/Castle/Main_building/Library/Merlin_s_office
[mission 32] $ ls grimoire_* > Drawer/inventory.txt

~/Castle/Main_building/Library/Merlin_s_office
[mission 32] $ gc

Congratulations, mission 32 has been successfully completed!
```

MISSIONE 33

```
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 upper 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.
```

```
~/Castle/Main_building/Library/Merlin_s_office
[mission 33] $ grep -l -i gsh grimoire_* 2>/dev/null
grimoire_JuLbPXviJGVnscJMI
grimoire_JunXXIlnjIYtZQHJFqleDH
grimoire_LUZYcOIJKoNF
grimoire_XPLkNCybfUNysChNOhu
grimoire_YDPkkSikGRRqTQIZxxjVhezR
grimoire_aEDcrnXUjThySKvdg
grimoire_cdUQAQYMDDAIEpFkynHHEP
grimoire_euvQjjestQTHpjfkLdwbpHTJ
grimoire_fYyZbBtmJthgFmyQUSXcuBf
grimoire_hJwraoYDOSQMzMjqcUNWUmySKgjDqRv
grimoire_ihwOzCKwAHbXvmDT
grimoire_ivjwLksVQxmwQHUhZtbsWdMSVfQm
grimoire_lIPoTtVvjwLpIzMiacOpxZhXGUN
grimoire_nTnb0vpfcC
grimoire_qQXwTcZxUCwUpiIMHyA
grimoire_taokJpeIyVxMIafNKIgzJF
grimoire_vFEwGYIQFmAvTncHxD
grimoire_vlmwsqmvBfZitBMmXWk
grimoire_wFtgssgMWaMZQUrVRarzyGkUakvX
grimoire_xwGFpVARzNjpDwdHsqjBFKvOclq

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

Congratulations, mission 33 has been successfully completed!

MISSIONE 34

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**.

```
~/Castle/Observatory
[mission 34] $ ./merlin
iJVyjUERnRNTxkNXdxIlbHIGPNsYZAyecpjcjLBsojnmhJLwXVRoaVLsSIHUEStZHpkDNVERCQdbvZQqtOyRKvYTBFedCZHqINwTafxHxQP
eyQETrUGYpKHhekSJczSrwonJrEYISoqEoqsNAOLNEGPMrgrNoaZFIhLLgYlzmmwIEVYXscbWXyxBSVJAvDtXVvTctSMhUwkqycDELHtztE
JRRz

~/Castle/Observatory
[mission 34] $ ./merlin > merlin_stdout.txt
iJVyjUERnRNTxkNXdxIlbHIGPNsYZAyecpjcjLBsojnmhJLwXVRoaVLsSIUStZHpkDNVRQdbvZQqtOyKvYTBFedCZHqINwTafxHxQPeYqrUGY
pHhekSJczSrwonJrEoqEoqsNALEGPMrgrNoaZFIhLLgYlzmmwIEVYXscbWXyxBSVJAvDtXVvctSMhUwkqycELHtztJz

~/Castle/Observatory
[mission 34] $ ./merlin 2> merlin_stderr.txt
THESECRETKEYISONSTDERR

~/Castle/Observatory
[mission 34] $ ./merlin 2> merlin_stderr.txt
THESECRETKEYISONSTDERR

~/Castle/Observatory
[mission 34] $ ./merlin < star_chart 2>merlin2.txt
THESECRETKEYISONSTDERR

~/Castle/Observatory
[mission 34] $ gc < merlin2.txt
What is the secret key?
Congratulations, mission 34 has been successfully completed!
```

MISSIONE 35

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.

```
~/Castle/Main_building/Throne_room
[mission 35] $ ls
Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 35] $ chmod +x
chmod: missing operand after '+x'
Try 'chmod --help' for more information.

~/Castle/Main_building/Throne_room
[mission 35] $ ls -hl
total 4.0K
drw-r--r-- 2 kali kali 4.0K Dec 16 17:23 Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 35] $ chmod +x Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 35] $ ls -l
total 4
drwxr-xr-x 2 kali kali 4096 Dec 16 17:23 Kings_quarter/

~/Castle/Main_building/Throne_room
[mission 35] $ cd Kings_quarter/
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 35] $ la

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 35] $ gx
gx: command not found

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 35] $ gc

Congratulations, mission 35 has been successfully completed!
```

MISSIONE 36

```
(`_____
| 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 eth file (or directory).
|
| Refer to the manual to discover which options are available.
|`)
```

```
~/Castle/Main_building/Throne_room/Kings_quarter
[mission 36] $ ls -hlA
total 8.0K
--w----- 1 kali kali 11 Dec 17 10:57 .secret_note
-rw-r--r-- 1 kali kali 11 Dec 17 10:57 note

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 36] $ chmod +r .secret_note

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 36] $ cat .secret_note
1828553827

~/Castle/Main_building/Throne_room/Kings_quarter
[mission 36] $ gc
What's the combination to open the King's safe? 1828553827

Congratulations, mission 36 has been successfully completed!
```



MISSIONE 37

```
/ \
| 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.

| 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.
| /                                /.
```

```

----- 1 kali kali 48 Dec 17 10:59 crown
~/Castle/Main_building/Throne_room/Safe
[mission 37] $ chmod +w+r+x crown

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

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

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

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

~/Forest/Hut/Chest
[mission 37] $ find crown
crown

~/Forest/Hut/Chest
[mission 37] $ gc
What are the 3 digits inscribed on the base of the crown?
What are the 3 digits inscribed on the base of the crown? ^C

~/Forest/Hut/Chest
[mission 37] $ cat crown
jgs
(^_+._)
`@*@*@/
{_925_}

~/Forest/Hut/Chest
[mission 37] $ gc
What are the 3 digits inscribed on the base of the crown? jgs
What are the 3 digits inscribed on the base of the crown? 925

Congratulations, mission 37 has been successfully completed!

```

MISSIONE 38

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 by hand which one contains the string "ruby".

```

~/Garden/Maze
[mission 38] $ find . -type f -exec file '{}' \;
./3b9360d1ff12a/47e657fa7dd2e/6d1c1d7a6773a7e106ef73d/31535: ASCII text
./0846a28e9053a872ec4414ef9df40f8/9da7f7e7247e8d0494ed17d/2b51c97f/14850: ASCII text
./dc3987aa7f2155749/54386422e21f271a783c98e163/eeaf1df4b9a3be87384cf16341b8/46860: ASCII text
./5de4c29a3f80d109292b00ce/5ed2f9a93bd/4e68d0c9ebc77fee1b3bf87ba25282/51209: ASCII text
./5de4c29a3f80d109292b00ce/badad54a452a6f19a1353/235bb6de19b2e726127999b6c25/48842: ASCII text
./450c4c4895eace675cb587/7ce225d039a578a831b3a/b151cf1191bff6/7857: ASCII text

~/Garden/Maze
[mission 38] $ find . -type f -exec grep rubis '{}' \;

~/Garden/Maze
[mission 38] $ find . -type f -exec grep rubin '{}' \;

~/Garden/Maze
[mission 38] $ find . -type f -exec grep ruby '{}' \;
7857 ruby f8e1cb95dcebda93ab33cd930985fa6bc1e503

~/Garden/Maze
[mission 38] $ find . -type f -exec grep -H ruby '{}' \;
./450c4c4895eace675cb587/7ce225d039a578a831b3a/b151cf1191bff6/7857:7857 ruby f8e1cb95dcebda93ab33cd930985fa6b
c1e1e503

~/Garden/Maze
[mission 38] $ mv ./450c4c4895eace675cb587/7ce225d039a578a831b3a/b151cf1191bff6/7857 ~/Forest/Hut/Chest

~/Garden/Maze
[mission 38] $ gc

Congratulations, mission 38 has been successfully completed!

```

MISSIONE 39

Mission goal

Combine several commands with "|" in order to find the diamond in the maze, and move it to your chest.

Remark

The filename doesn't contain the string "diamond". You need to find a file that contains the string "diamond".

```

~/Garden/Maze
[mission 39] $ find . -type f -print | xargs grep diamond
./85794d3bfedf115a0e590e26/6060cb12a612807e2181c96f751/a545262dedabb600d2299f76302:a545262dedabb600d2299f7630
2 diamond e25212eff7a10ac2cc3b909b4b1f820cca682a5b

~/Garden/Maze
[mission 39] $ find . -type f -exec grep -H diamond '{}' \; | xargs mv -v ~/Forest/Hut/Chest
mv: target 'e25212eff7a10ac2cc3b909b4b1f820cca682a5b': No such file or directory

~/Garden/Maze
[mission 39] $

~/Garden/Maze
[mission 39] $ find . -exec grep -l diamond '{}' \; | xargs mv -v ~/Forest/Hut/Chest
mv: cannot overwrite non-directory './85794d3bfedf115a0e590e26/6060cb12a612807e2181c96f751/a545262dedabb600d2
299f76302' with directory '/home/kali/gameshell.1/World/Forest/Hut/Chest'

~/Garden/Maze
[mission 39] $ find . -exec grep -l diamond '{}' \; | xargs mv -v -t ~/Forest/Hut/Chest
renamed './85794d3bfedf115a0e590e26/6060cb12a612807e2181c96f751/a545262dedabb600d2299f76302' → '/home/kali/g
ameshell.1/World/Forest/Hut/Chest/a545262dedabb600d2299f76302'

~/Garden/Maze
[mission 39] $ gc

Congratulations, mission 39 has been successfully completed!

```

MISSIONE 40

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.

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.

```
(0)
~/Stall
[mission 40] $ grep King *_s_c_r_o_l_l_* | grep -v PAID
the King bought a pick for 2 coppers.
the King bought a pick for 3 coppers.
the King bought an opal for 2 coppers.
the King bought a horse for 4 coppers.
the King bought a shiny rock for 5 coppers.
the King bought a knife for 3 coppers.
(1)
~/Stall
[mission 40] $ gc
How much does the king owe? 19

Congratulations, mission 40 has been successfully completed!
```

MISSIONE 41

```
| Mission goal
| _____
|
| Combine several commands with ``||`` in order to find the number of unpaid
| items.
|
| 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.
```

```
(0)
~/Stall
[mission 41] $ grep -v 'PAID' *_s_c_r_o_l_l_* | wc -l
44
(1)
~/Stall
[mission 41] $ gc
How many unpaid items are there? 44

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

MISSIONE 42 - FINALE

Mission goal
=====

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
—

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

```
~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ tr 'a-z' 'm-zA-N' < secret_message
here is my will:
you will get my chest, and everything it contains.
this chest is in the cellar, and the word to make
it re-appear is: vMiC
merlin the enchanter

~/Castle/Main_building/Library/Merlin_s_office/Drawer
[mission 42] $ gc
What's the key that will make Merlin's chest to appear?
vMiC

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

