

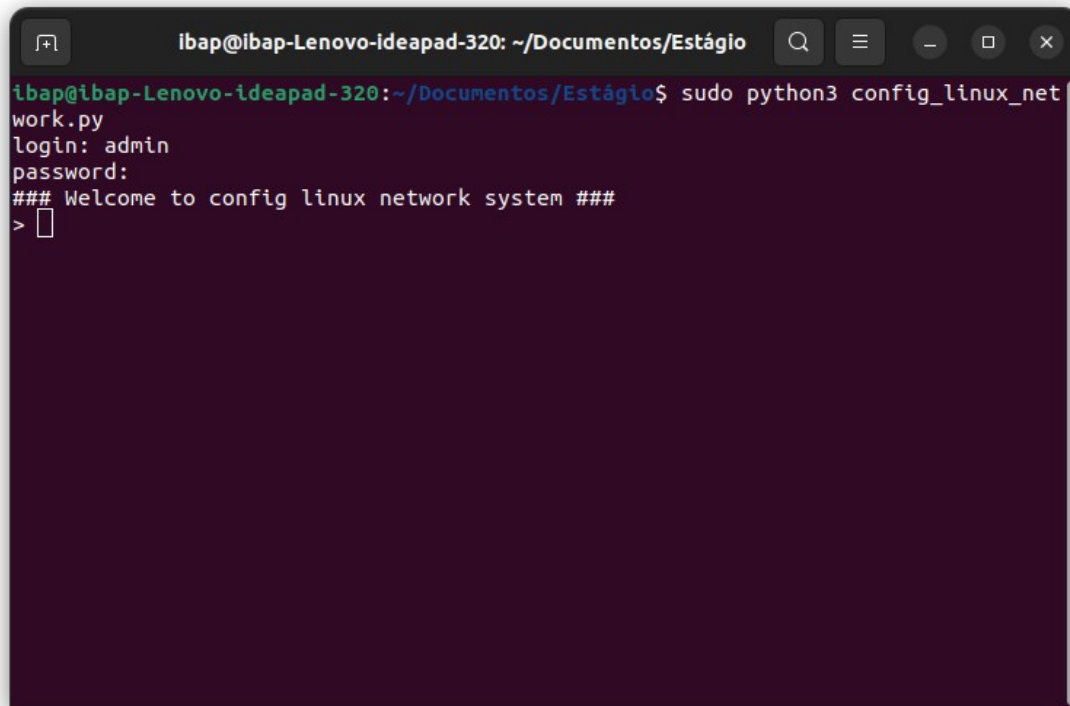
- Feature: User Login

Scenario: User provides correct login credentials

Given the correct username is "admin" and the correct password is "admin"

When the user logs in with the correct credentials

Then the system welcomes the user to the configuration system

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio' with search, menu, and window control buttons. The terminal shows the execution of 'sudo python3 config_linux_net work.py'. It prompts for 'login:' with 'admin' entered, then 'password:' which is also 'admin'. The output is '### Welcome to config linux network system ###' followed by a prompt '>' and a cursor.

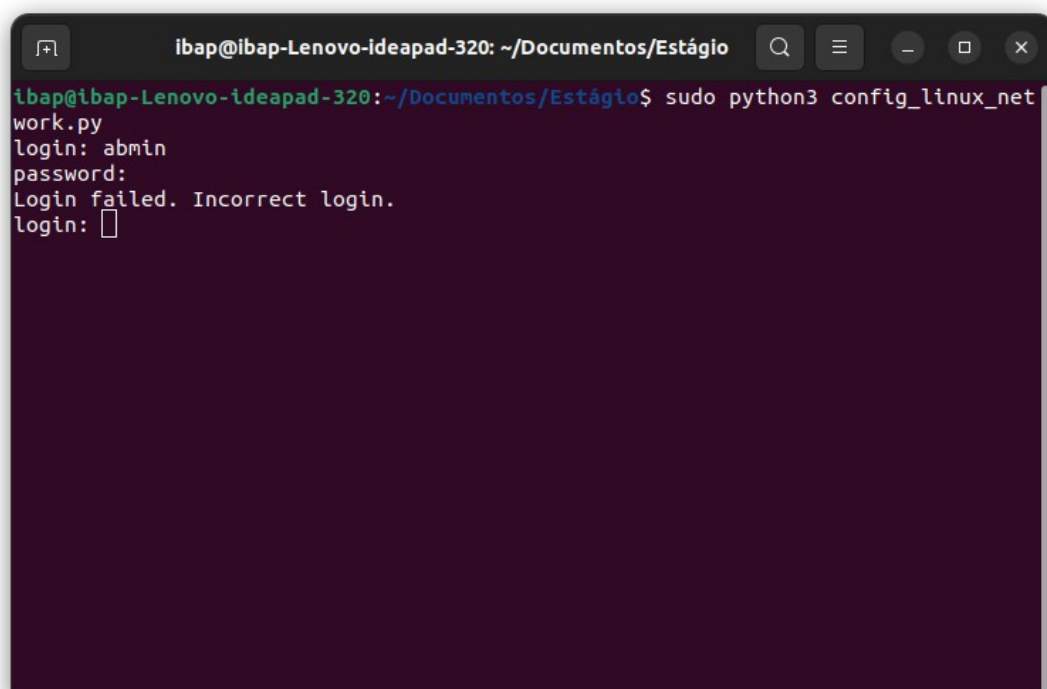
```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_net
work.py
login: admin
password:
### Welcome to config linux network system ###
> 
```

Scenario: User provides incorrect username

Given the correct username is "admin" and the correct password is "admin"

When the user logs in with an incorrect username

Then the system displays a login failure message for incorrect username

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio' with search, menu, and window control buttons. The terminal shows the execution of 'sudo python3 config_linux_net work.py'. It prompts for 'login:' with 'abmin' entered, then 'password:'. The output is 'Login failed. Incorrect login.' followed by a prompt 'login:' and a cursor.

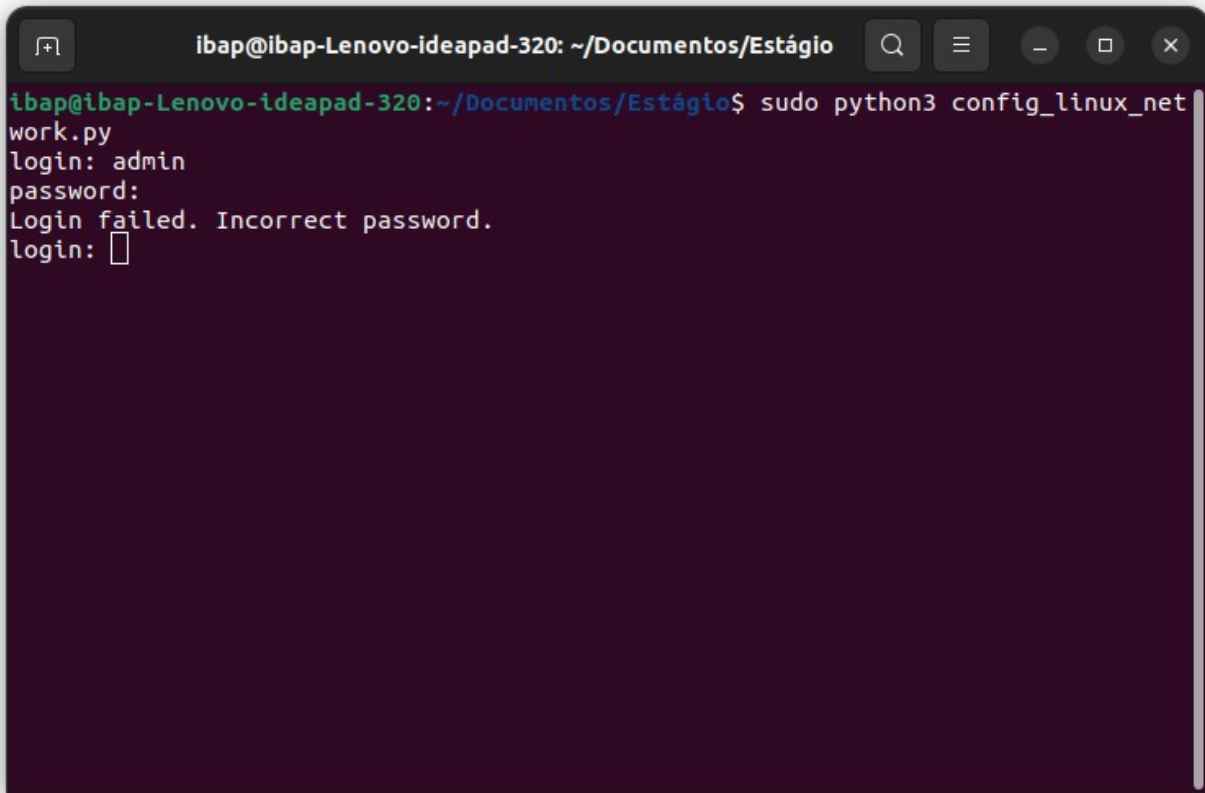
```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_net
work.py
login: abmin
password:
Login failed. Incorrect login.
login: 
```

Scenario: User provides correct username but incorrect password

Given the correct username is "admin" and the correct password is "admin"

When the user logs in with the correct username but incorrect password

Then the system displays a login failure message for incorrect password

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user runs 'sudo python3 config_linux_network.py'. The program prompts for 'login:' and the user enters 'admin'. It then prompts for 'password:' and the user enters an incorrect password. The program outputs 'Login failed. Incorrect password.' and then prompts for 'login:' again with an empty input field.

```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
Login failed. Incorrect password.
login: 
```

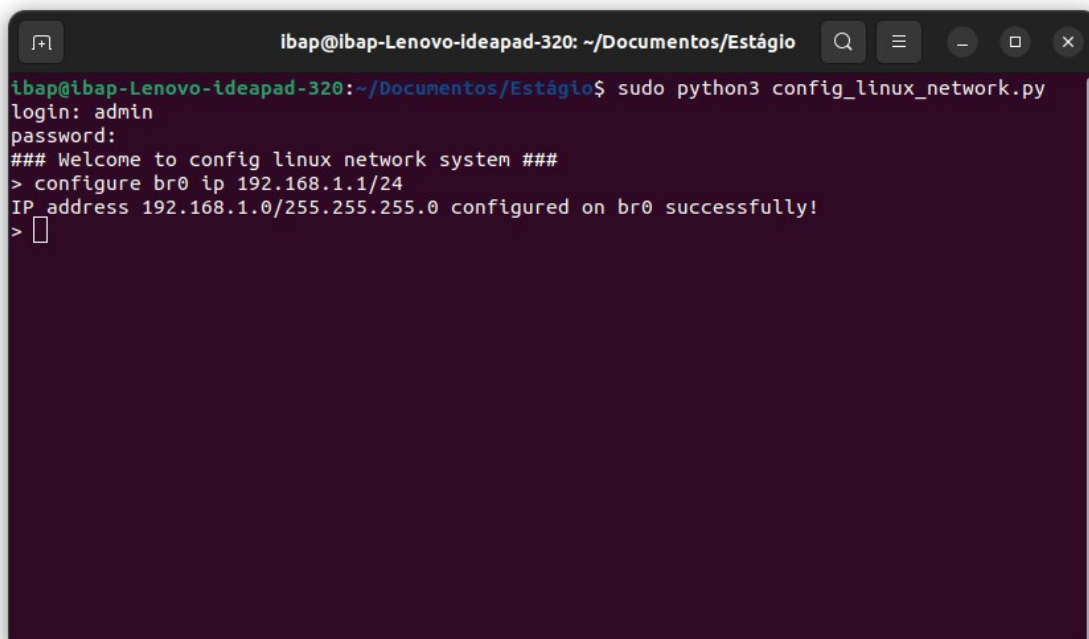
- Feature: Configure Interface IP

Scenario: User successfully configures IP for a network interface

Given I login successfully into config_linux_network

When I execute the command "configure br0 ip 192.168.1.1/24"

Then IP address 192.168.1.1/24 is configured on br0 successfully

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user runs 'sudo python3 config_linux_network.py'. The program prompts for 'login:' and the user enters 'admin'. It then prompts for 'password:' and the user enters the correct password. The program outputs '### Welcome to config linux network system ###'. The user enters '> configure br0 ip 192.168.1.1/24'. The program outputs 'IP address 192.168.1.0/255.255.255.0 configured on br0 successfully!' and then prompts for '>' with an empty input field.

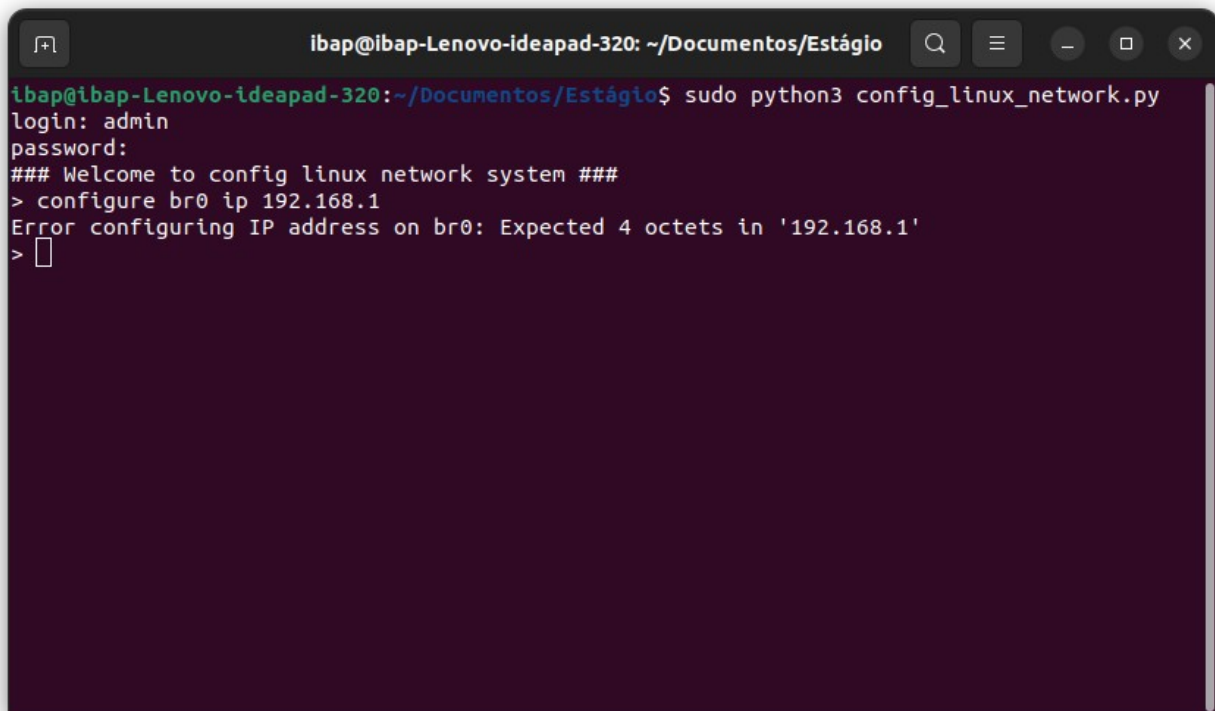
```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> configure br0 ip 192.168.1.1/24
IP address 192.168.1.0/255.255.255.0 configured on br0 successfully!
> 
```

Scenario: User attempts to configure IP with invalid subnet

Given I login successfully into config_linux_network

When I execute the command "configure br0 ip 192.168.1"

Then an error message is displayed indicating an invalid ip address

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio' with search, menu, and window control icons. The terminal shows the execution of 'sudo python3 config_linux_network.py'. It prompts for 'login: admin' and 'password:'. A welcome message '### Welcome to config linux network system ###' is displayed. The user enters '> configure br0 ip 192.168.1', which results in the error message 'Error configuring IP address on br0: Expected 4 octets in '192.168.1''. The prompt '>' is shown again.

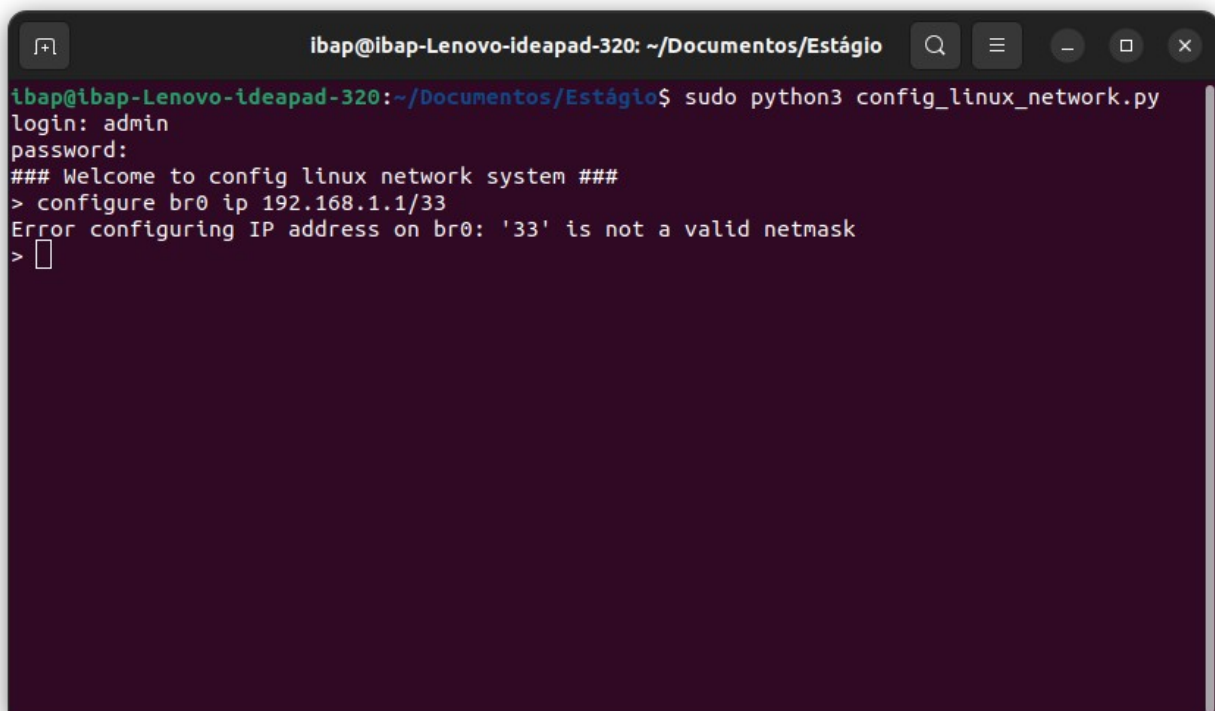
```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> configure br0 ip 192.168.1
Error configuring IP address on br0: Expected 4 octets in '192.168.1'
>
```

Scenario: User attempts to configure IP with invalid subnet

Given I login successfully into config_linux_network

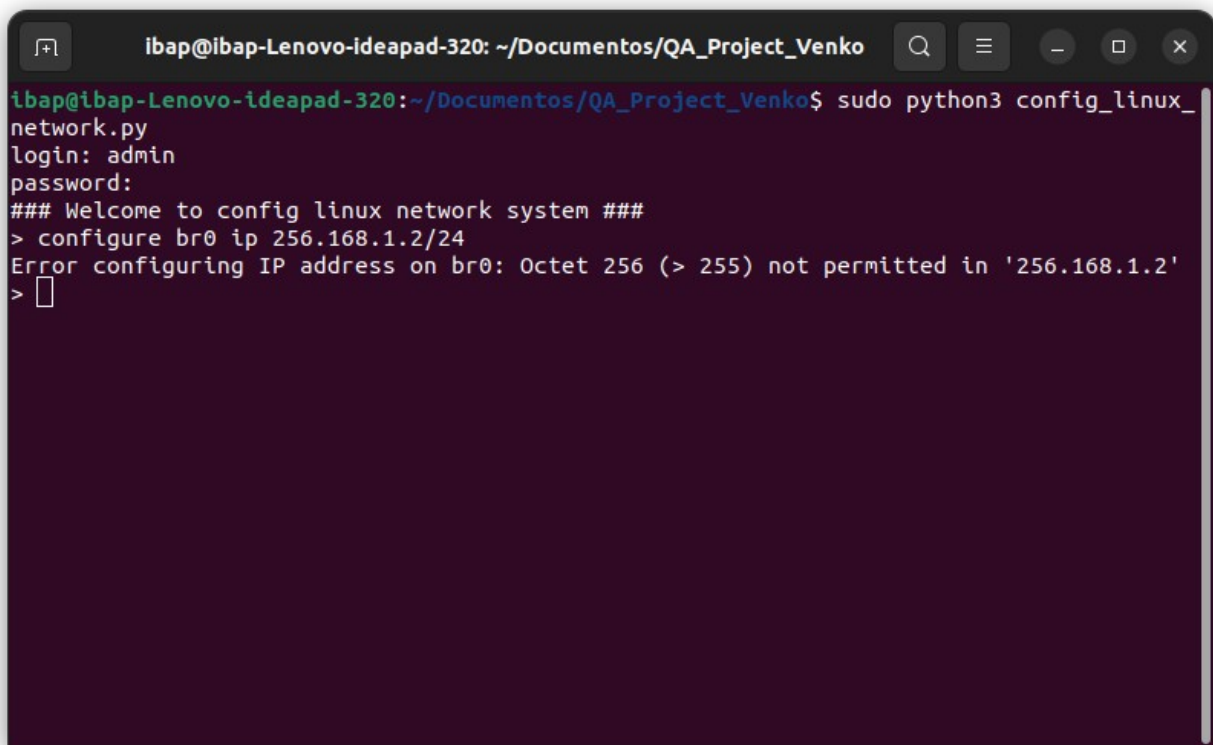
When I execute the command "configure br0 ip 192.168.1.1/33"

Then an error message is displayed indicating an invalid netmask

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio' with search, menu, and window control icons. The terminal shows the execution of 'sudo python3 config_linux_network.py'. It prompts for 'login: admin' and 'password:'. A welcome message '### Welcome to config linux network system ###' is displayed. The user enters '> configure br0 ip 192.168.1.1/33', which results in the error message 'Error configuring IP address on br0: '33' is not a valid netmask'. The prompt '>' is shown again.

```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> configure br0 ip 192.168.1.1/33
Error configuring IP address on br0: '33' is not a valid netmask
>
```

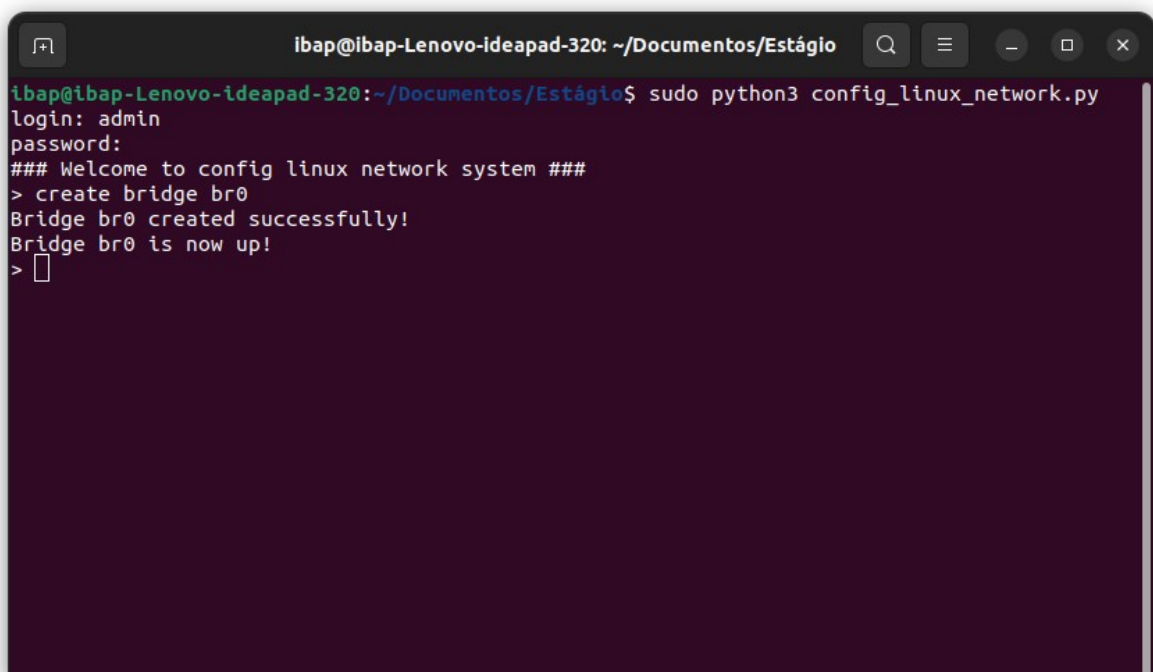
Scenario: User attempts to configure IP with invalid subnet
Given I login successfully into config_linux_network
When I execute the command "configure br0 ip 192.168.1"
Then an error message is displayed indicating an invalid ip address



```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/QA_Project_Venko
ibap@ibap-Lenovo-ideapad-320:~/Documentos/QA_Project_Venko$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> configure br0 ip 256.168.1.2/24
Error configuring IP address on br0: Octet 256 (> 255) not permitted in '256.168.1.2'
>
```

- Feature: Create Bridge

Scenario: User successfully creates a bridge
Given I login successfully into config_linux_network
When I execute the command "create bridge br0"
Then Bridge br0 is created successfully
And Bridge br0 is now up



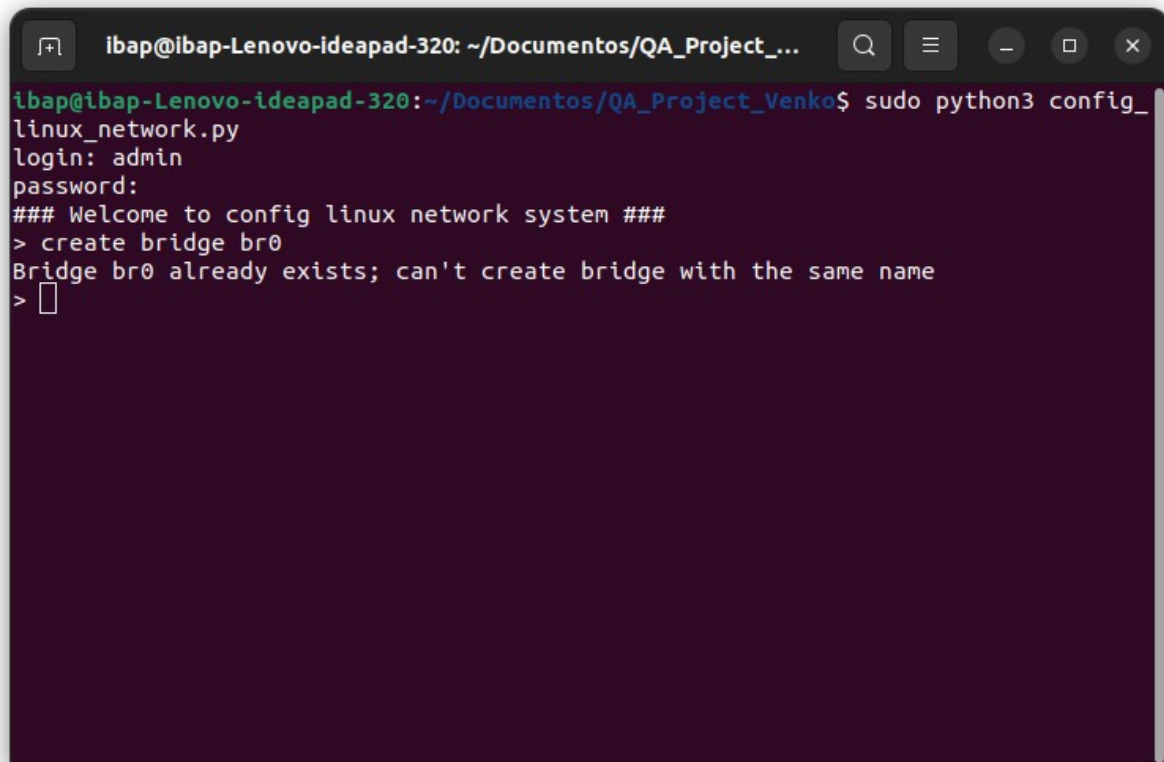
```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> create bridge br0
Bridge br0 created successfully!
Bridge br0 is now up!
>
```

Scenario: User attempts to create a bridge with existing name

Given I login successfully into config_linux_network

When I execute the command "create bridge br0"

Then an error message is displayed indicating that the bridge already exists



A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/QA_Project_...' shows the execution of 'sudo python3 config_linux_network.py'. The user logs in as 'admin'. The prompt '### Welcome to config linux network system ###' is displayed. The user enters the command '> create bridge br0', and the system responds with the error message: 'Bridge br0 already exists; can't create bridge with the same name'. The prompt '>' is shown again, indicating the command has finished.

```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/QA_Project_...$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> create bridge br0
Bridge br0 already exists; can't create bridge with the same name
>
```

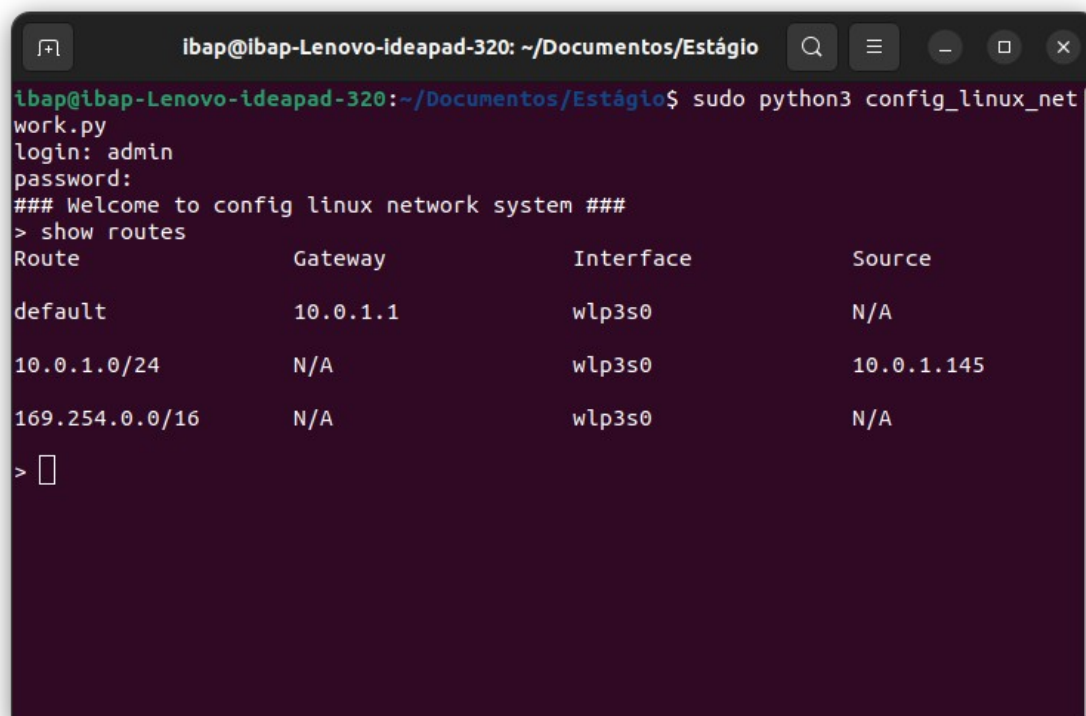
- Feature: Show routes

Scenario: User wants to view all IP routes

Given I login successfully into config_linux_network

When I execute the command "show routes"

Then all IP routes are listed with route, gateway, interface, and source information



A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio' shows the execution of 'sudo python3 config_linux_network.py'. The user logs in as 'admin'. The prompt '### Welcome to config linux network system ###' is displayed. The user enters the command '> show routes', and the system displays a table of IP routes.

```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> show routes
Route                Gateway            Interface          Source
default              10.0.1.1           wlp3s0             N/A
10.0.1.0/24           N/A                wlp3s0             10.0.1.145
169.254.0.0/16        N/A                wlp3s0             N/A
>
```

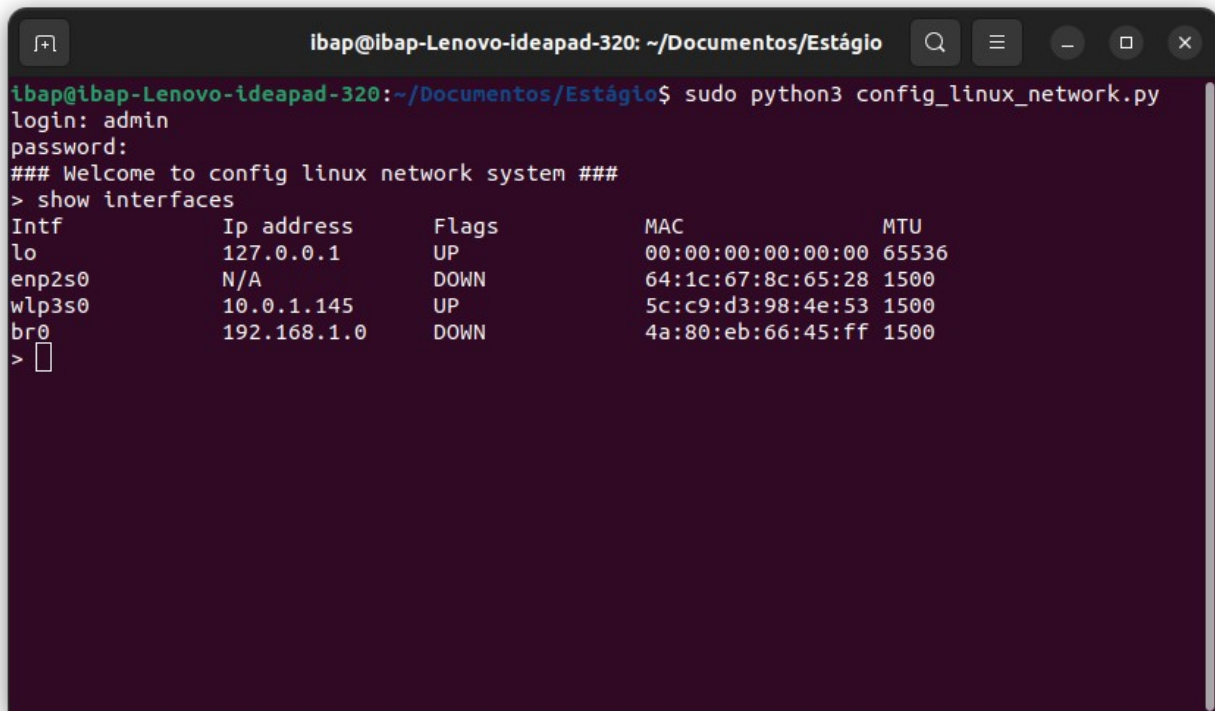
- Feature: Show interfaces

Scenario: User wants to view all network interfaces

Given I login successfully into config_linux_network

When I execute the command "show interfaces"

Then all Linux interfaces are listed with interface, ip address, flags, MAC and MTU



A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user has run 'sudo python3 config_linux_network.py'. The prompt is 'login: admin', followed by 'password:'. A welcome message '### Welcome to config linux network system ###' is displayed. The user enters '> show interfaces'. The output is a table with 5 columns: Intf, Ip address, Flags, MAC, and MTU. The data rows are: 'lo' with IP '127.0.0.1', 'UP' flag, MAC '00:00:00:00:00:00', and MTU '65536'; 'enp2s0' with IP 'N/A', 'DOWN' flag, MAC '64:1c:67:8c:65:28', and MTU '1500'; 'wlp3s0' with IP '10.0.1.145', 'UP' flag, MAC '5c:c9:d3:98:4e:53', and MTU '1500'; and 'br0' with IP '192.168.1.0', 'DOWN' flag, MAC '4a:80:eb:66:45:ff', and MTU '1500'. The prompt '>' is shown at the bottom.

```
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> show interfaces
Intf      Ip address  Flags    MAC                MTU
lo        127.0.0.1   UP       00:00:00:00:00:00  65536
enp2s0    N/A        DOWN     64:1c:67:8c:65:28  1500
wlp3s0    10.0.1.145 UP       5c:c9:d3:98:4e:53  1500
br0       192.168.1.0 DOWN     4a:80:eb:66:45:ff  1500
>
```

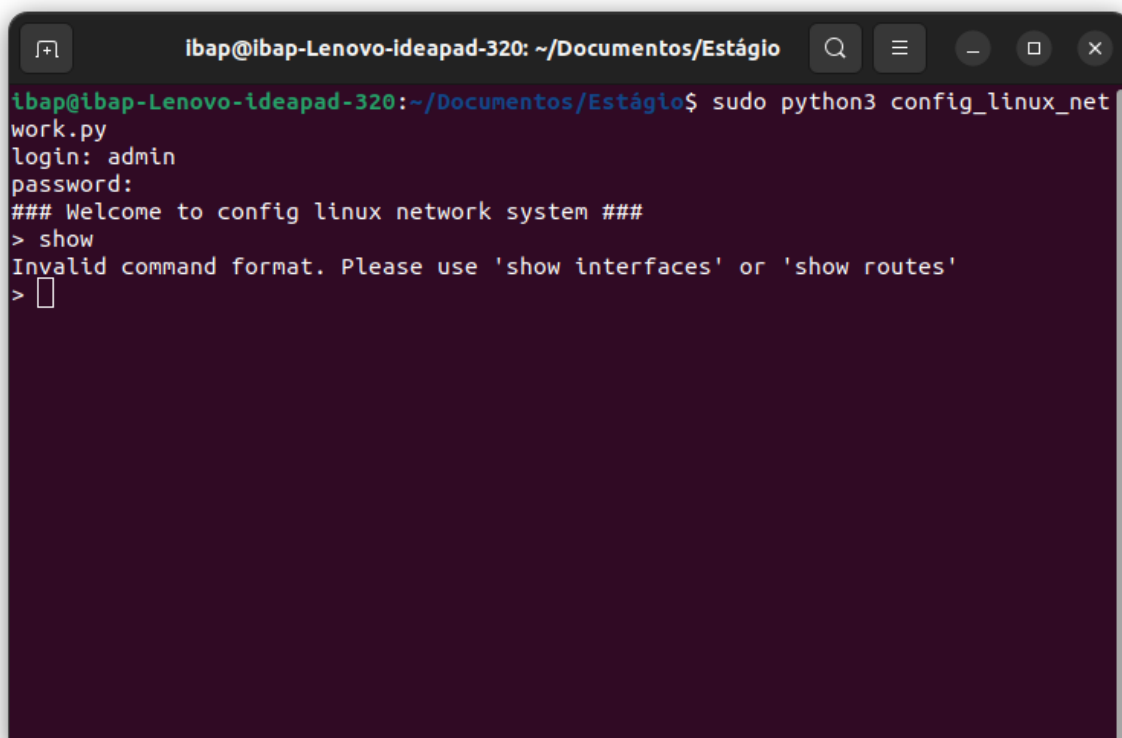
- Feature: Invalid command

Scenario: User enters an invalid show command

Given I login successfully into config_linux_network

When I execute the command "show"

Then an error message is displayed indicating an invalid command format



A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user has run 'sudo python3 config_linux_network.py'. The prompt is 'login: admin', followed by 'password:'. A welcome message '### Welcome to config linux network system ###' is displayed. The user enters '> show'. The output is an error message: 'Invalid command format. Please use 'show interfaces' or 'show routes''. The prompt '>' is shown at the bottom.

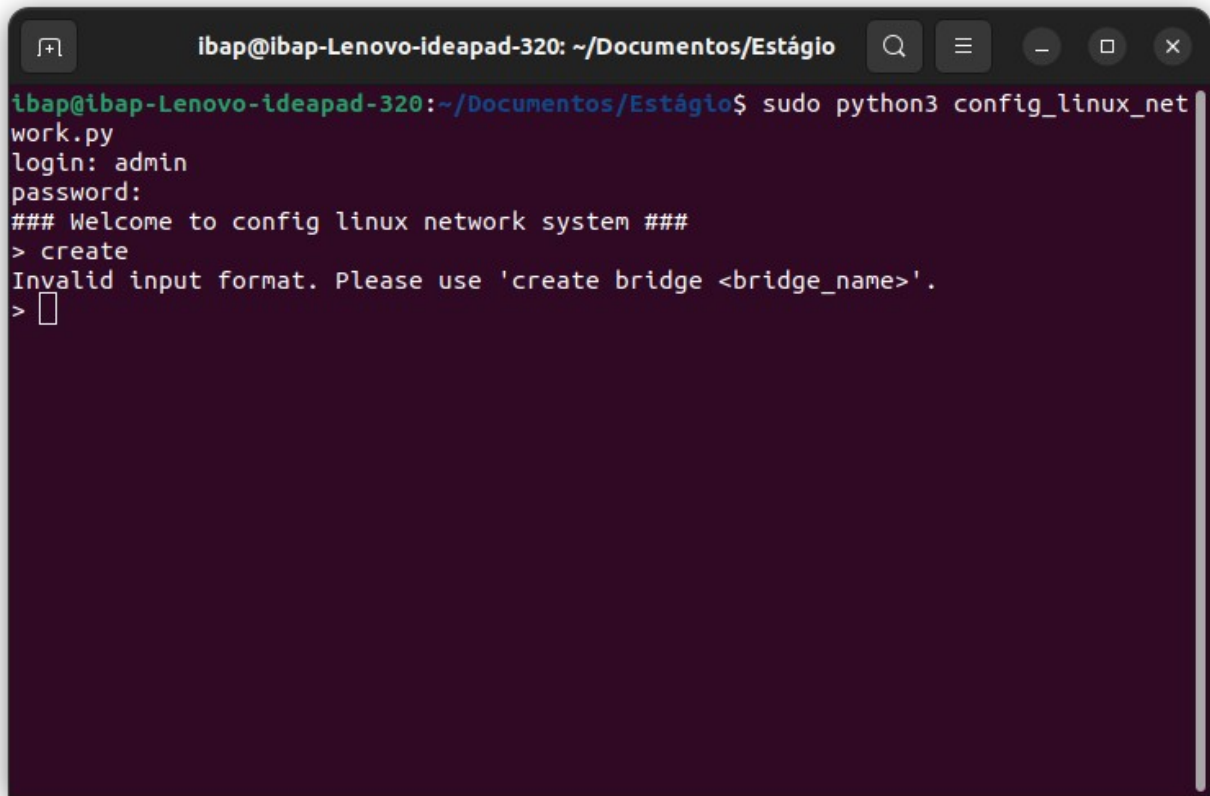
```
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> show
Invalid command format. Please use 'show interfaces' or 'show routes'
>
```


Scenario: User enters an invalid create command

Given I login successfully into config_linux_network

When I execute the command "create"

Then an error message is displayed indicating an invalid command format

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user has run 'sudo python3 config_linux_network.py'. The prompt is 'login: admin', followed by 'password:'. A welcome message '### Welcome to config linux network system ###' is shown. The user enters '> create', and the program responds with 'Invalid input format. Please use 'create bridge <bridge_name>'.', followed by a new prompt '> ' with a cursor.

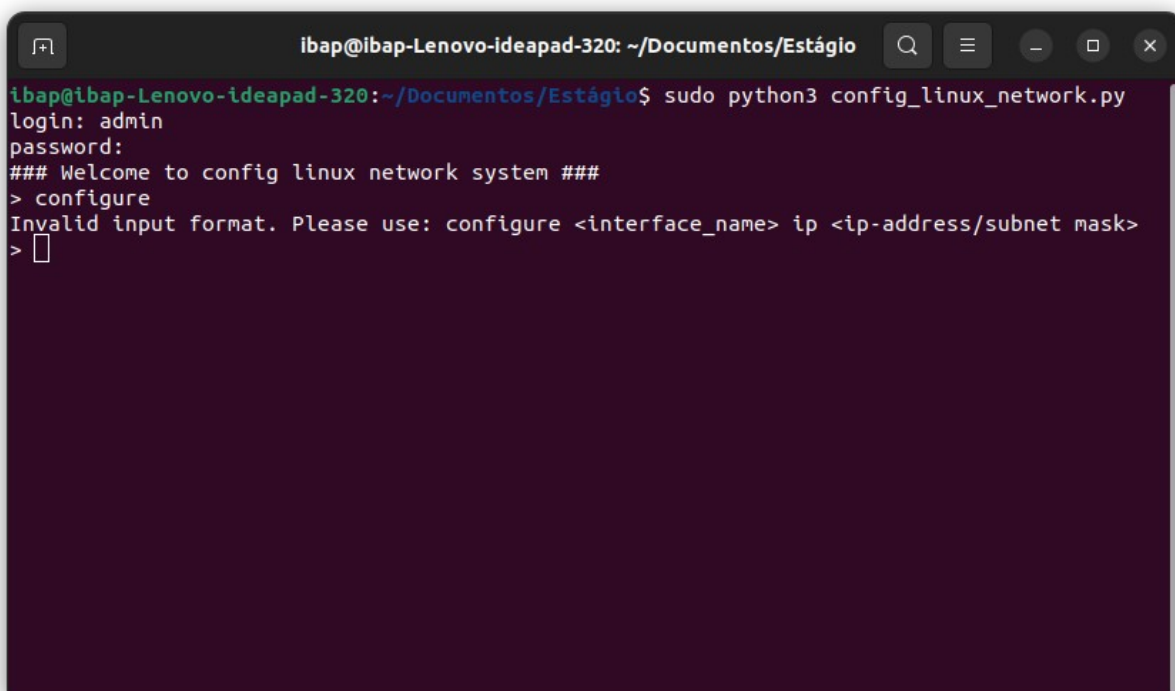
```
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> create
Invalid input format. Please use 'create bridge <bridge_name>'.
> 
```

Scenario: User enters an invalid configure command

Given I login successfully into config_linux_network

When I execute the command "configure"

Then an error message is displayed indicating an invalid command format

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The user has run 'sudo python3 config_linux_network.py'. The prompt is 'login: admin', followed by 'password:'. A welcome message '### Welcome to config linux network system ###' is shown. The user enters '> configure', and the program responds with 'Invalid input format. Please use: configure <interface_name> ip <ip-address/subnet mask>', followed by a new prompt '> ' with a cursor.

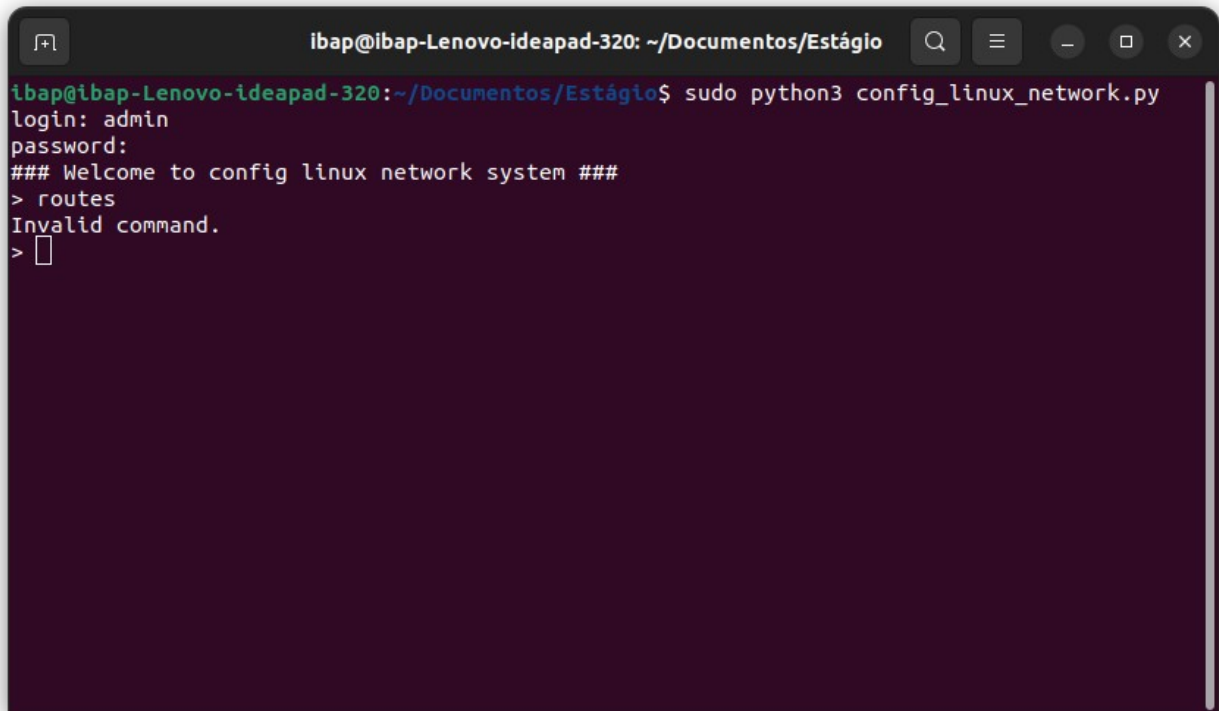
```
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> configure
Invalid input format. Please use: configure <interface_name> ip <ip-address/subnet mask>
> 
```

Scenario: User enters an invalid configure command

Given I login successfully into config_linux_network

When I execute a wrong command

Then an error message is displayed indicating an invalid command

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The prompt is 'ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio\$'. The user enters 'sudo python3 config_linux_network.py'. The program prompts for 'login: admin' and 'password:'. It then displays '### Welcome to config linux network system ###'. The user enters '> routes'. The program responds with 'Invalid command.' and shows a prompt '> ' with a cursor.

```
ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> routes
Invalid command.
> 
```

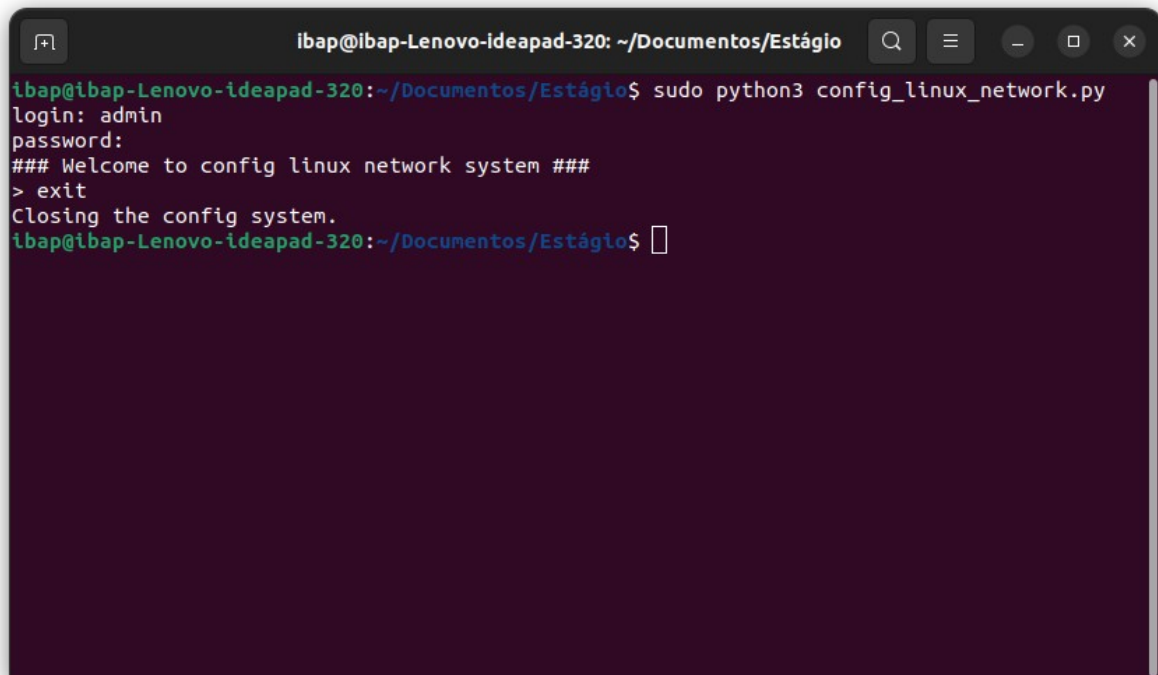
- Feature: Exit program

Scenario: User wants to exit configuration system

Given I login successfully into config_linux_network

When I execute the command "exit"

Then an message is displayed indicating closing the config system.

A terminal window titled 'ibap@ibap-Lenovo-ideapad-320: ~/Documentos/Estágio'. The prompt is 'ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio\$'. The user enters 'sudo python3 config_linux_network.py'. The program prompts for 'login: admin' and 'password:'. It then displays '### Welcome to config linux network system ###'. The user enters '> exit'. The program responds with 'Closing the config system.' and shows the shell prompt 'ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio\$' with a cursor.

```
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ sudo python3 config_linux_network.py
login: admin
password:
### Welcome to config linux network system ###
> exit
Closing the config system.
ibap@ibap-Lenovo-ideapad-320:~/Documentos/Estágio$ 
```