



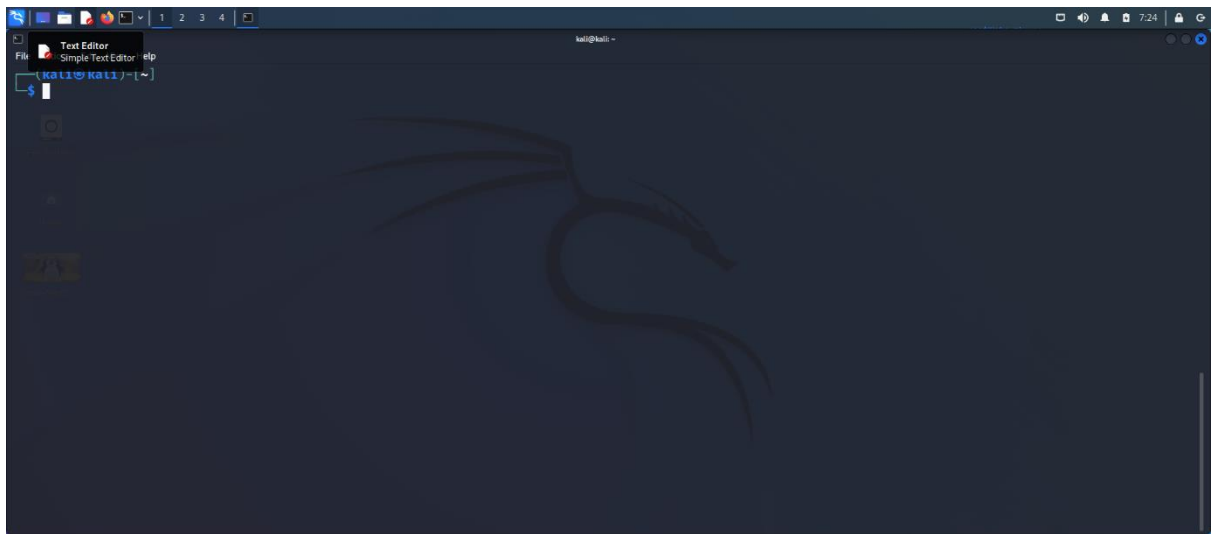
PERSONAL LINUX

LINUX FUNDEMENTALS PROJECT

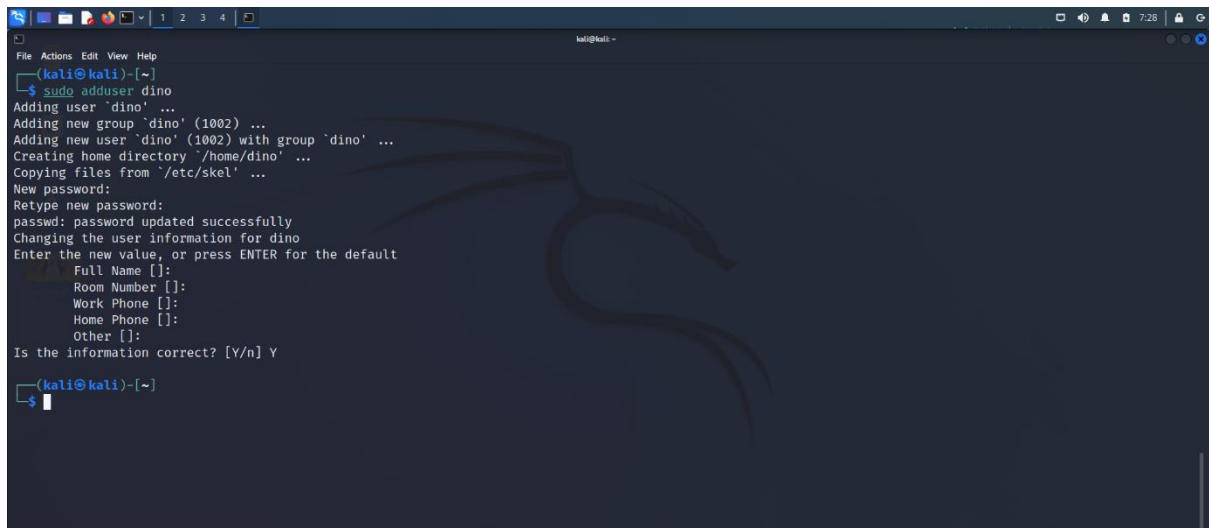


DINIE HAZIQ BIN MOHAMAD RAAFE
CFC2407

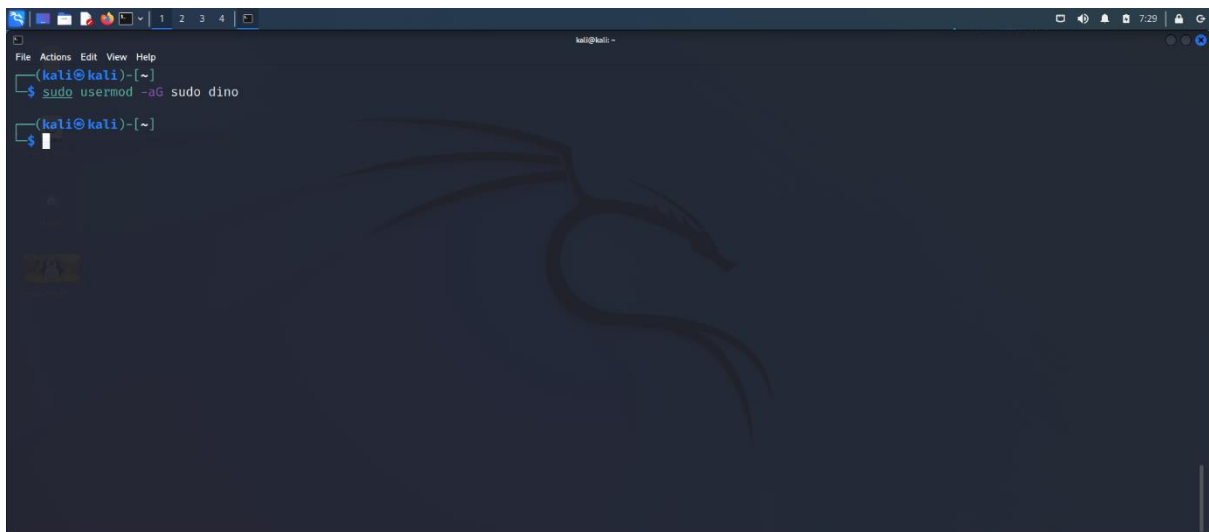
Kali Linux terminal on kali account:



Adding new user into terminal:



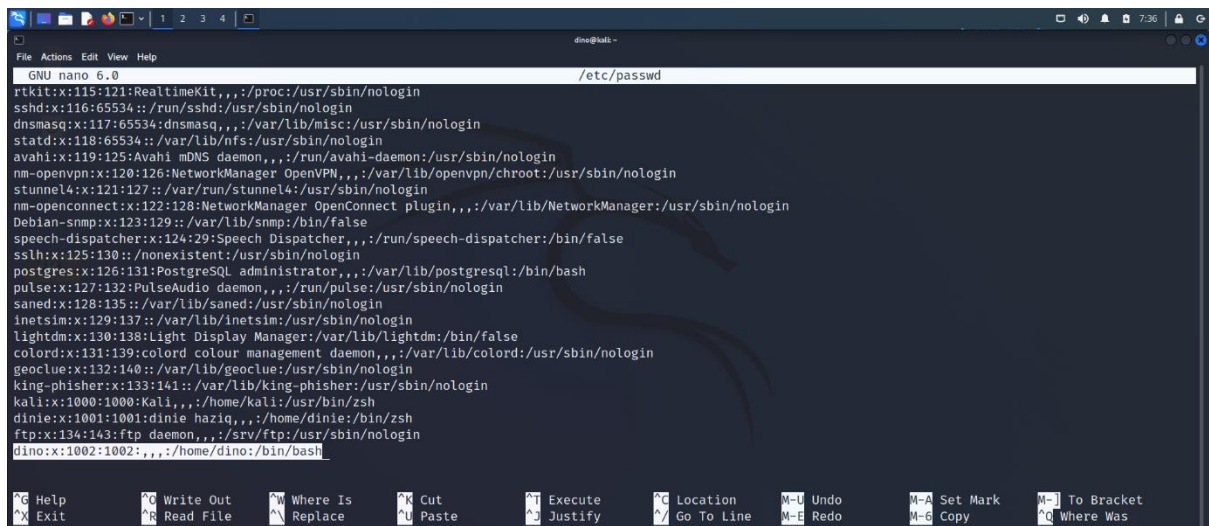
Adding new user into sudo group to get super user do access:



```
kali@kali ~  
$ sudo usermod -aG sudo dino  
$
```

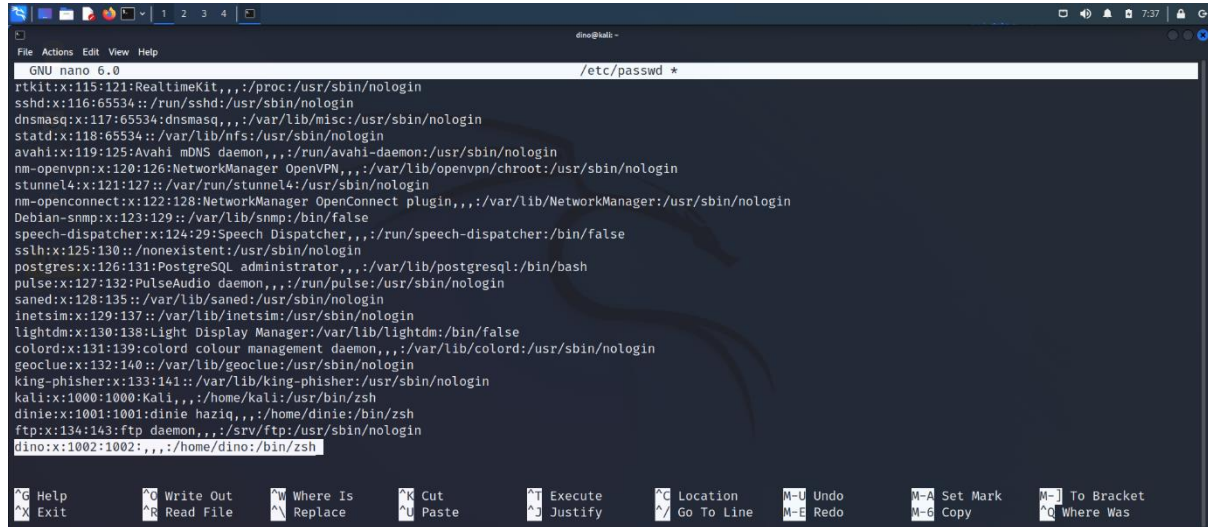
Changing user language into /bin/zsh from /bin/bash

Before:



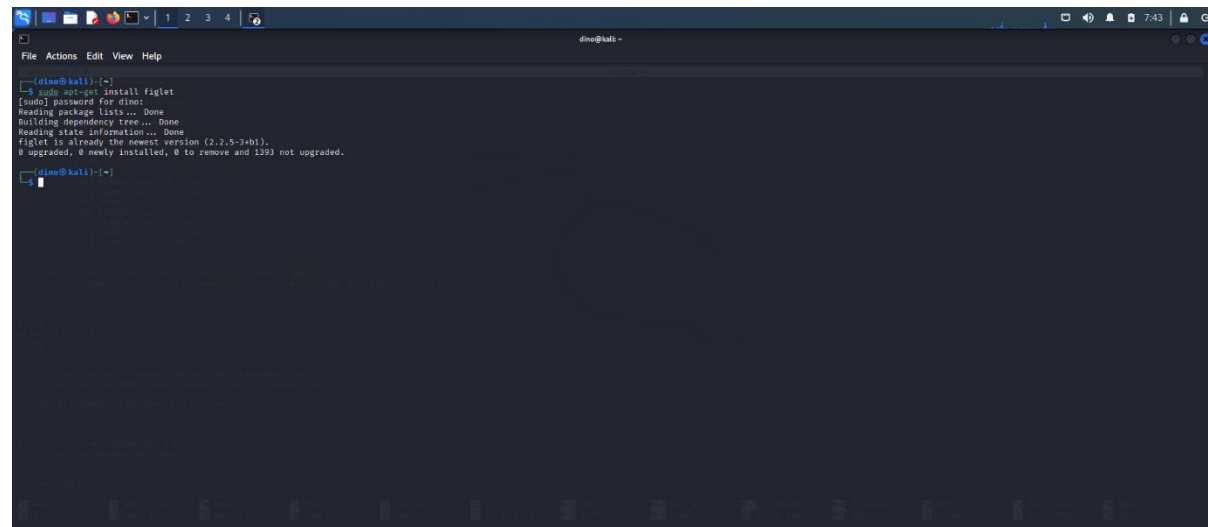
```
GNU nano 6.0 /etc/passwd  
rtkit:x:115:121:RealtimeKit,,,:/proc:/usr/sbin/nologin  
sshd:x:116:65534::/run/sshd:/usr/sbin/nologin  
dnsmasq:x:117:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin  
statd:x:118:65534::/var/lib/nfs:/usr/sbin/nologin  
avahi:x:119:125:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin  
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/opensvpn/chroot:/usr/sbin/nologin  
stunnel4:x:121:127::/var/run/stunnel4:/usr/sbin/nologin  
nm-openconnect:x:122:128:NetworkManager OpenConnect plugin,,,:/var/lib/NetworkManager:/usr/sbin/nologin  
Debian-snmpp:x:123:129::/var/lib/snmpp:/bin/false  
speech-dispatcher:x:124:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false  
sshd:x:125:130::/nonexistent:/usr/sbin/nologin  
postgres:x:126:131:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash  
pulse:x:127:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin  
saned:x:128:135::/var/lib/saned:/usr/sbin/nologin  
inetsim:x:129:137::/var/lib/inetsim:/usr/sbin/nologin  
lightdm:x:130:138:Light Display Manager:/var/lib/lightdm:/bin/false  
colord:x:131:139:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin  
geoclue:x:132:140::/var/lib/geoclue:/usr/sbin/nologin  
king-phisher:x:133:141::/var/lib/king-phisher:/usr/sbin/nologin  
kali:x:1000:1000:Kali,,,:/home/kali:/usr/bin/zsh  
dinnie:x:1001:1001:dinnie haziq,,,:/home/dinnie:/bin/zsh  
ftp:x:134:143:ftp daemon,,,:/srv/ftp:/usr/sbin/nologin  
dino:x:1002:1002::/home/dino:/bin/zsh
```

After:



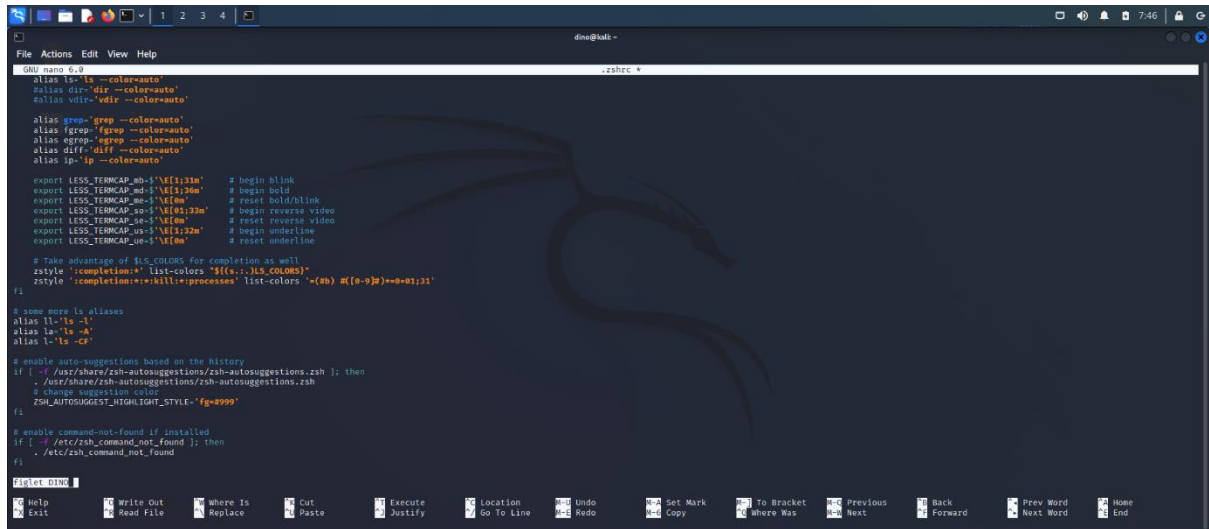
```
GNU nano 6.0 /etc/passwd *
rtkit:x:115:121:RealtimeKit,,,:/proc:/usr/sbin/nologin
sshd:x:116:65534::/run/ssh:/usr/sbin/nologin
dnsmasq:x:117:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
statd:x:118:65534::/var/lib/nfs:/usr/sbin/nologin
avahi:x:119:125:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
nm-openvpn:x:120:126:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
stunnel4:x:121:127::/var/run/stunnel4:/usr/sbin/nologin
nm-openconnect:x:122:128:NetworkManager OpenConnect plugin,,,:/var/lib/NetworkManager:/usr/sbin/nologin
Debian-snmp:x:123:129::/var/lib/snmp:/bin/false
speech-dispatcher:x:124:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
sshd:x:125:130::/nonexistent:/usr/sbin/nologin
postgres:x:126:131:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
pulse:x:127:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
sane:x:128:135::/var/lib/sane:/usr/sbin/nologin
inetsim:x:129:137::/var/lib/inetsim:/usr/sbin/nologin
lightdm:x:130:138:Light Display Manager:/var/lib/lightdm:/bin/false
colord:x:131:139:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:132:140::/var/lib/geoclue:/usr/sbin/nologin
king-phisher:x:133:141::/var/lib/king-phisher:/usr/sbin/nologin
kali:x:1000:1000:Kali,,,:/home/kali:/usr/bin/zsh
dinie:x:1001:1001:dinie haziq,,,:/home/dinie:/bin/zsh
ftp:x:134:143:ftp daemon,,,:/srv/ftp:/usr/sbin/nologin
dino:x:1002:1002::,/home/dino:/bin/zsh
```

Download figlet for customisation of the terminal:



```
dino@kali:~$ sudo apt-get install figlet
[sudo] password for dino:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
figlet is already the newest version (2.2.5-3abi).
0 upgraded, 0 newly installed, 0 to remove and 1393 not upgraded.
```

Edit user **.zshrc** file to customise by adding figlet <user> to the end of the file to creates a banner with user name whenever the user log into the machine:



```
GNU nano 2.9.3 .zshrc
# Aliases
alias ls='ls --color=auto'
alias dir='dir --color=auto'
alias vdir='vdir --color=auto'

# Grep
alias grep='grep --color=auto'
alias fgrep='fgrep --color=auto'
alias egrep='egrep --color=auto'
alias diff='diff --color=auto'
alias ip='ip --color=auto'

# begin blink
export LESS_TERMCAP_mb=$'\E[1;31m'
export LESS_TERMCAP_md=$'\E[1;36m'
export LESS_TERMCAP_me=$'\E[0m'
export LESS_TERMCAP_so=$'\E[01;33m'
export LESS_TERMCAP_se=$'\E[0m'
export LESS_TERMCAP_ue=$'\E[0m'
export LESS_TERMCAP_ue=$'\E[0m'

# Take advantage of $LS_COLORS for completion as well
zstyle 'completion:*' list-colors "${LS_COLORS}"
zstyle 'completion:*:kill:*:processes' list-colors '=(no) M([0-9])=0-01;31'

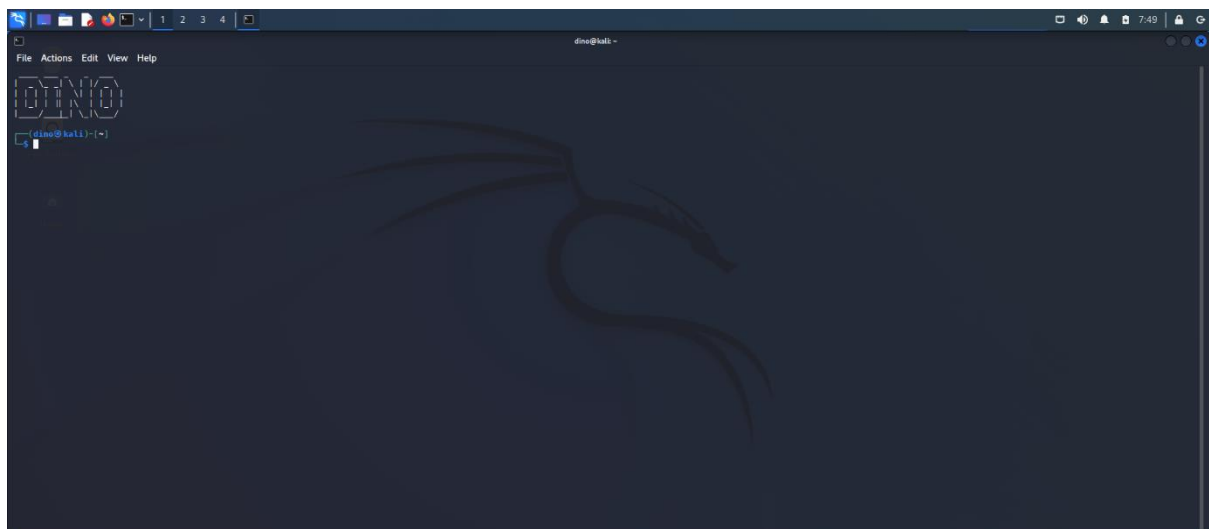
# some more ls aliases
alias ll='ls -l'
alias la='ls -A'
alias l='ls -C'

# enable auto-suggestions based on the history
if [ -f /usr/share/zsh-autosuggestions/zsh-autosuggestions.zsh ]; then
  . /usr/share/zsh-autosuggestions/zsh-autosuggestions.zsh
  # change suggestion color
  ZSH_AUTOSUGGEST_HIGHLIGHT_STYLE='fg=9999'
fi

# enable command-not-found if installed
if [ -f /etc/zsh_command_not_found ]; then
  . /etc/zsh_command_not_found
fi

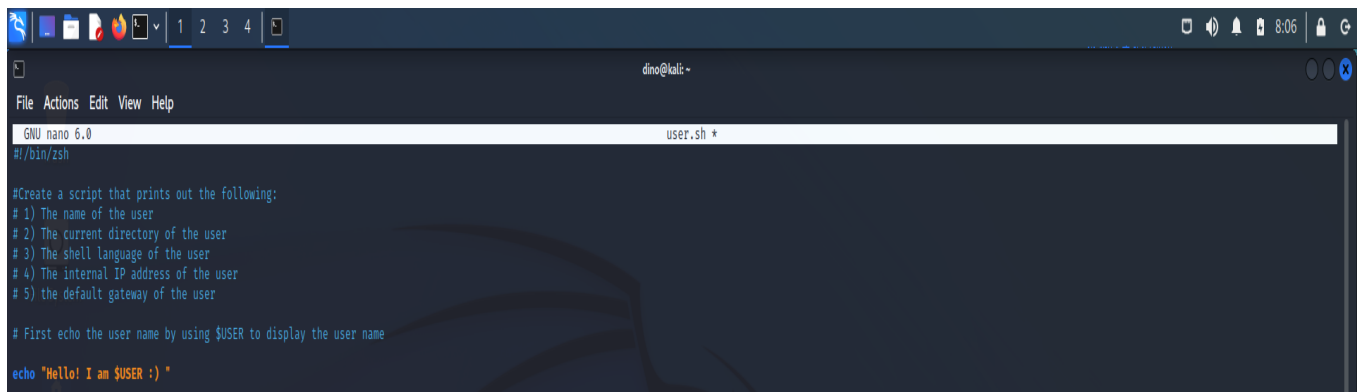
figlet DINO
```

Result of adding figlet into .zshrc file:



Next is creating a Script that prints out the user's information. (user, directory, ip address and gateway)

First is to use \$USER to display the name of the user



```
GNU nano 6.0 user.sh *
#!/bin/zsh

#Create a script that prints out the following:
# 1) The name of the user
# 2) The current directory of the user
# 3) The shell language of the user
# 4) The internal IP address of the user
# 5) the default gateway of the user

# First echo the user name by using $USER to display the user name
echo "Hello! I am $USER :)"
```

Next, is to use \$PWD to show the current directory the user is in



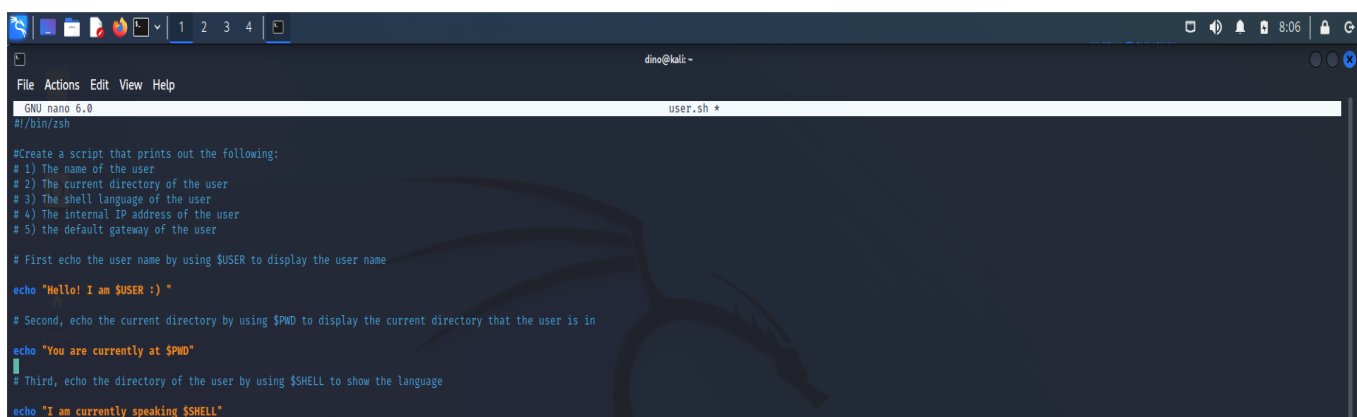
```
GNU nano 6.0 user.sh *
#!/bin/zsh

#Create a script that prints out the following:
# 1) The name of the user
# 2) The current directory of the user
# 3) The shell language of the user
# 4) The internal IP address of the user
# 5) the default gateway of the user

# First echo the user name by using $USER to display the user name
echo "Hello! I am $USER :)"

# Second, echo the current directory by using $PWD to display the current directory that the user is in
echo "You are currently at $PWD"
```

Third, by using \$SHELL we are able to show the user's language on the reminal



```
GNU nano 6.0 user.sh *
#!/bin/zsh

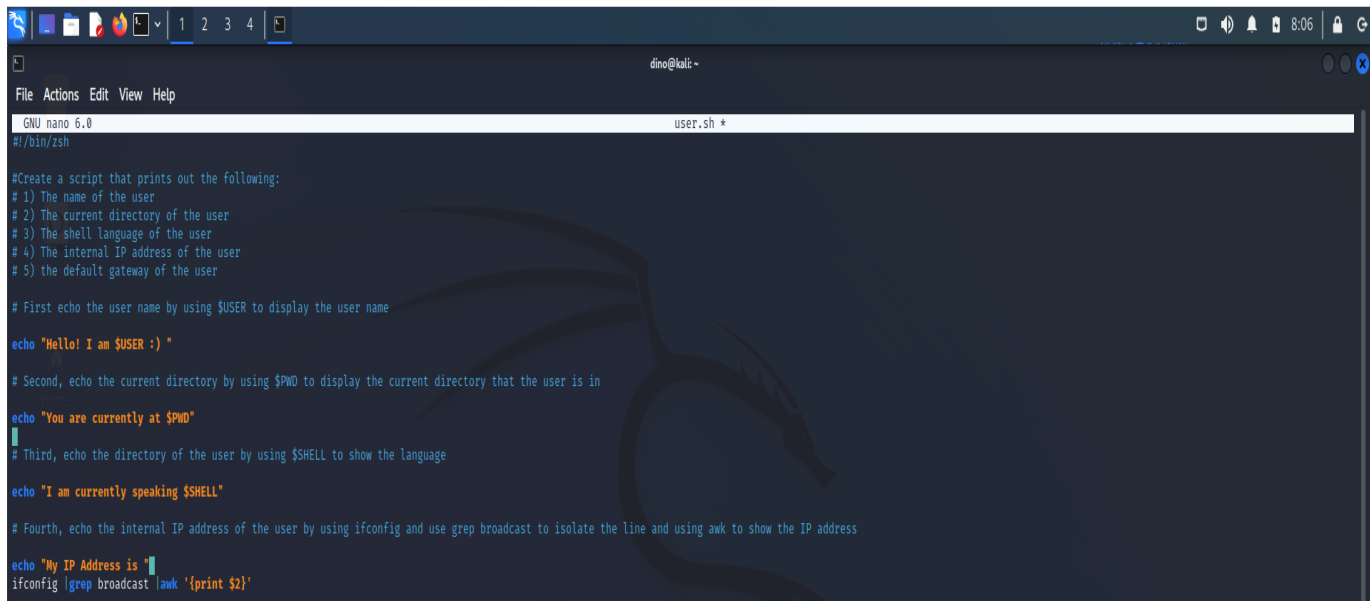
#Create a script that prints out the following:
# 1) The name of the user
# 2) The current directory of the user
# 3) The shell language of the user
# 4) The internal IP address of the user
# 5) the default gateway of the user

# First echo the user name by using $USER to display the user name
echo "Hello! I am $USER :)"

# Second, echo the current directory by using $PWD to display the current directory that the user is in
echo "You are currently at $PWD"

# Third, echo the directory of the user by using $SHELL to show the language
echo "I am currently speaking $SHELL"
```

Fourth, to display the IP address of the user, we use ifconfig. Grep for broadcast to isolate the line and awk to display the ip address

A screenshot of a terminal window with a dark blue background and a dragon logo. The window title is 'dino@kali: ~'. The terminal shows a nano editor editing a file named 'user.sh'. The script contains comments and code to display user information. The fourth step is highlighted, showing the use of 'ifconfig | grep broadcast | awk '{print \$2}'' to display the IP address.

```
GNU nano 6.0 user.sh *
#//bin/zsh

#Create a script that prints out the following:
# 1) The name of the user
# 2) The current directory of the user
# 3) The shell language of the user
# 4) The internal IP address of the user
# 5) the default gateway of the user

# First echo the user name by using $USER to display the user name

echo "Hello! I am $USER :)"

# Second, echo the current directory by using $PWD to display the current directory that the user is in

echo "You are currently at $PWD"

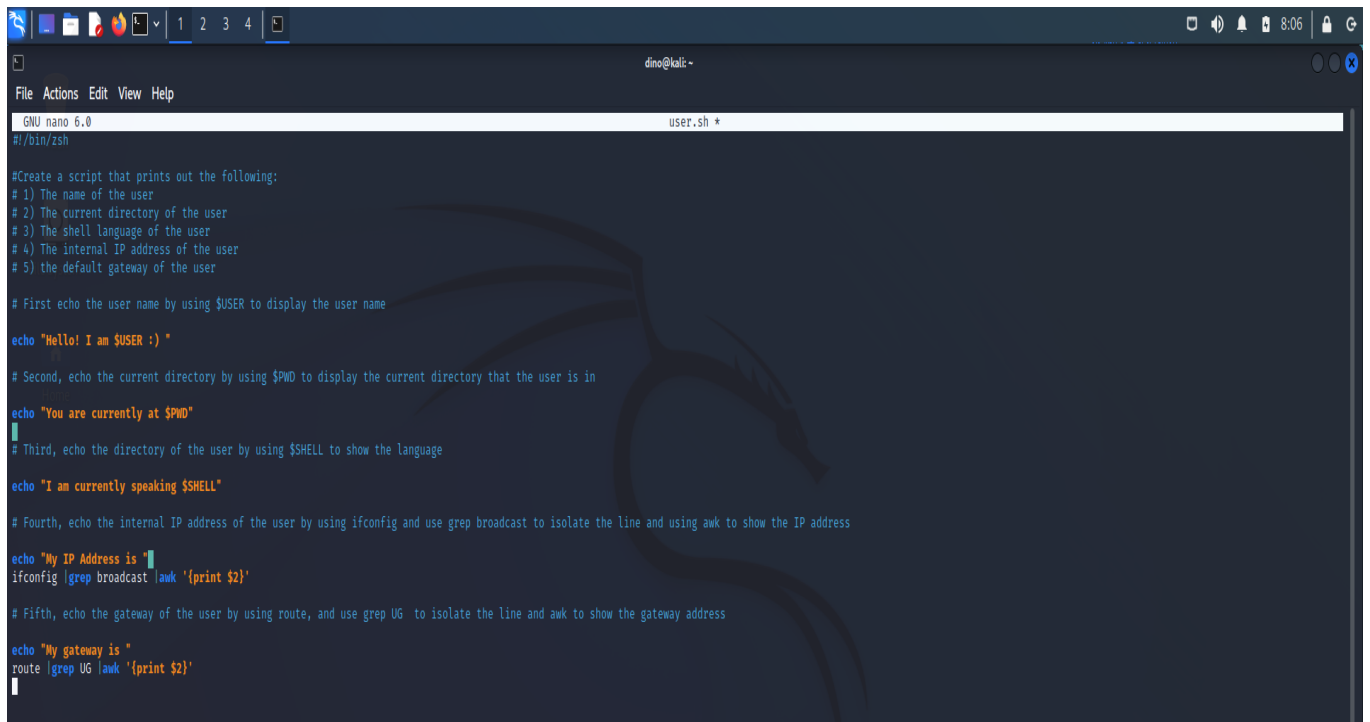
# Third, echo the directory of the user by using $SHELL to show the language

echo "I am currently speaking $SHELL"

# Fourth, echo the internal IP address of the user by using ifconfig and use grep broadcast to isolate the line and using awk to show the IP address

echo "My IP Address is "
ifconfig |grep broadcast |awk '{print $2}'
```

Fifth, to display the gateway of the user, we use route. We grep UG to isolate the line and awk to show the gateway address

A screenshot of a terminal window with a dark blue background and a dragon logo. The window title is 'dino@kali: ~'. The terminal shows a nano editor editing a file named 'user.sh'. The script contains comments and code to display user information. The fifth step is highlighted, showing the use of 'route | grep UG | awk '{print \$2}'' to display the gateway address.

```
GNU nano 6.0 user.sh *
#//bin/zsh

#Create a script that prints out the following:
# 1) The name of the user
# 2) The current directory of the user
# 3) The shell language of the user
# 4) The internal IP address of the user
# 5) the default gateway of the user

# First echo the user name by using $USER to display the user name

echo "Hello! I am $USER :)"

# Second, echo the current directory by using $PWD to display the current directory that the user is in

echo "You are currently at $PWD"

# Third, echo the directory of the user by using $SHELL to show the language

echo "I am currently speaking $SHELL"

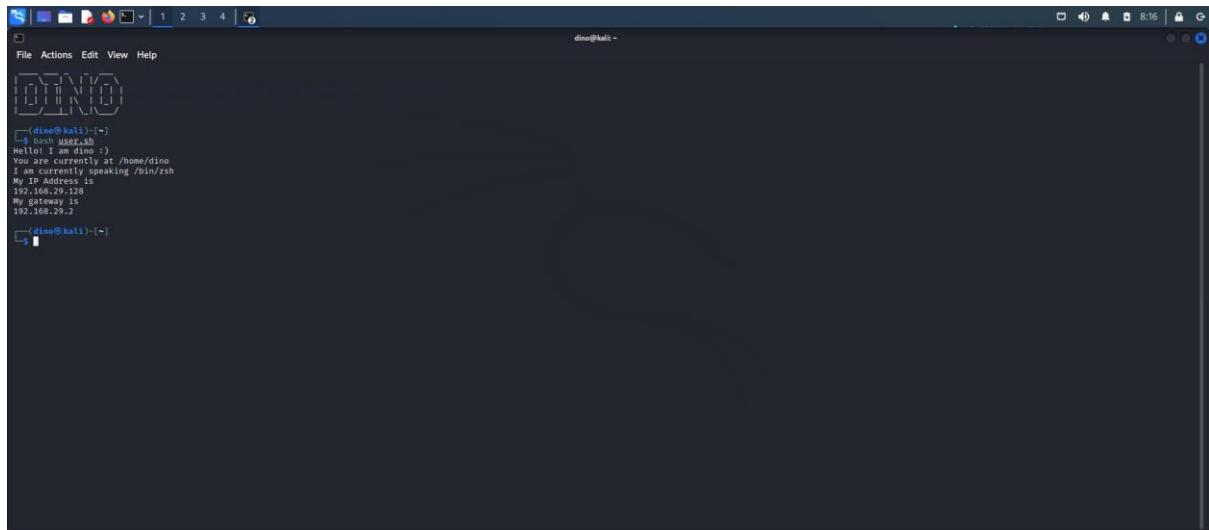
# Fourth, echo the internal IP address of the user by using ifconfig and use grep broadcast to isolate the line and using awk to show the IP address

echo "My IP Address is "
ifconfig |grep broadcast |awk '{print $2}'

# Fifth, echo the gateway of the user by using route, and use grep UG to isolate the line and awk to show the gateway address

echo "My gateway is "
route |grep UG |awk '{print $2}'
```

The result:



```
File Actions Edit View Help
[ASCII ART]
(dino@kali):~$ whoami
Hello! I am dino :)
You are currently at /home/dino
I am currently speaking /bin/zsh
My IP Address is
192.168.29.138
My gateway is
192.168.29.2
(dino@kali):~$
```