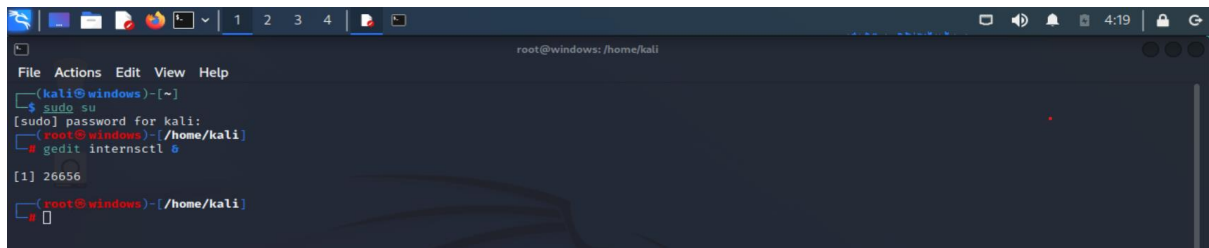


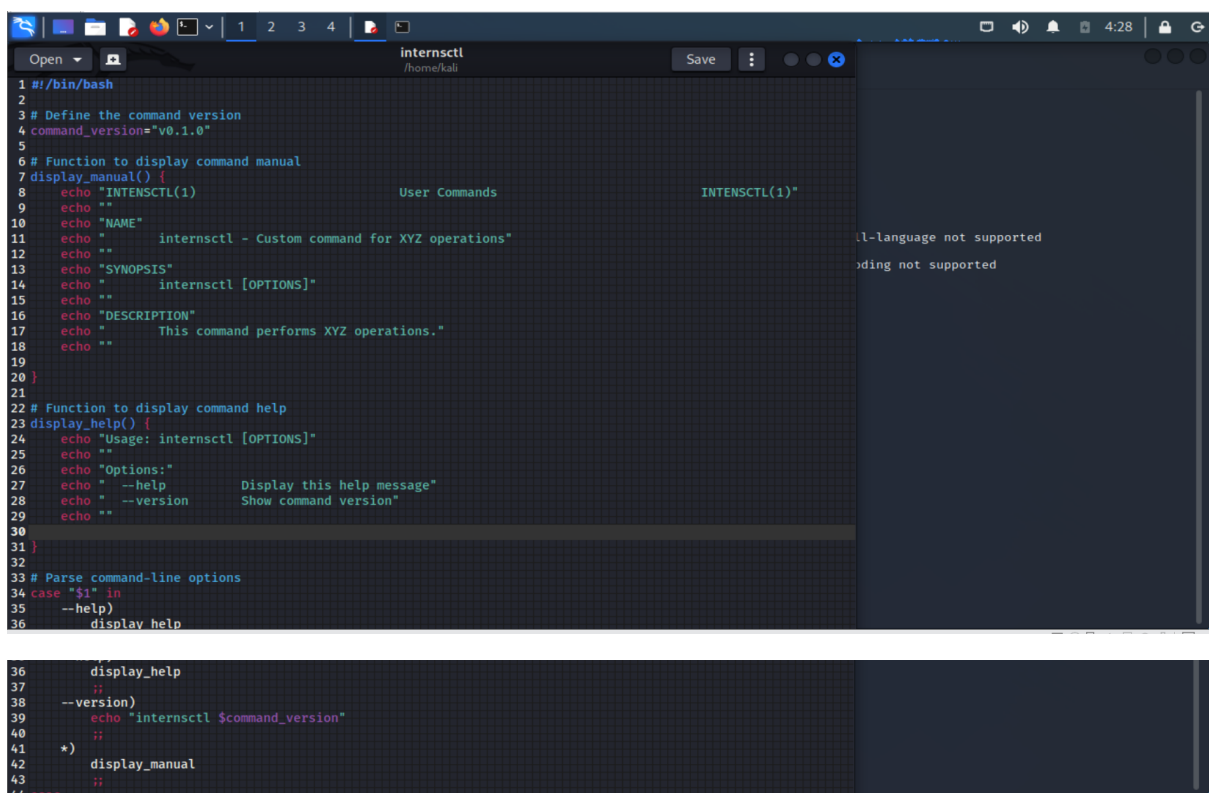
SECTION A

Created script named: internsctl



```
root@windows: /home/kali
File Actions Edit View Help
(kali@windows)~$ sudo su
[sudo] password for kali:
(root@windows)~$ gedit internsctl
[1] 26656
(root@windows)~$
```

Write code



```
internsctl
/home/kali
Save

1 #!/bin/bash
2
3 # Define the command version
4 command_version="v0.1.0"
5
6 # Function to display command manual
7 display_manual() {
8     echo "INTENSCTL(1)                User Commands                INTENSCTL(1)"
9     echo ""
10    echo "NAME"
11    echo "    internsctl - Custom command for XYZ operations"
12    echo ""
13    echo "SYNOPSIS"
14    echo "    internsctl [OPTIONS]"
15    echo ""
16    echo "DESCRIPTION"
17    echo "    This command performs XYZ operations."
18    echo ""
19 }
20
21
22 # Function to display command help
23 display_help() {
24     echo "Usage: internsctl [OPTIONS]"
25     echo ""
26     echo "Options:"
27     echo "    --help          Display this help message"
28     echo "    --version       Show command version"
29     echo ""
30 }
31
32
33 # Parse command-line options
34 case "$1" in
35     --help)
36         display_help
37
38         display_help
39         ;;
40     --version)
41         echo "internsctl $command_version"
42         ;;
43     *)
44         display_manual
45         ;;
46 esac
```

CODE

```
#!/bin/bash
```

```
# Define the command version
```

```
command_version="v0.1.0"
```

```
# Function to display command manual
```

```
display_manual() {
```

```
    echo "INTENSCTL(1)                User Commands                INTENSCTL(1)"
```

```
    echo ""
```

```

echo "NAME"

echo "    internsctl - Custom command for XYZ operations"
echo ""

echo "SYNOPSIS"

echo "    internsctl [OPTIONS]"
echo ""

echo "DESCRIPTION"

echo "    This command performs XYZ operations."
echo ""

# Add more sections and descriptions as needed for your command
}

```

Function to display command help

```

display_help() {
    echo "Usage: internsctl [OPTIONS]"
    echo ""
    echo "Options:"
    echo "  --help    Display this help message"
    echo "  --version  Show command version"
    echo ""

    # Add more help information as needed for your command
}

```

Parse command-line options

```

case "$1" in
    --help)
        display_help
        ;;
    --version)
        echo "internsctl $command_version"
        ;;
)

```

```

*)
    display_manual
;;
esac

```

1. **Set execution permissions:** Make the script executable using the chmod command:

```
chmod +x internsctl
```

Run the script:

1. To view the manual, use `man ./internsctl`



```

root@windows: /home/kali
File Actions Edit View Help
#!/bin/bash

# Define the command version command_version="v0.1.0"

# Function to display command manual display_manual() {
echo "INTENSCTL(1)"
echo ""
echo "NAME"
echo "    internsctl - Custom command for XYZ operations"
echo ""
echo "SYNOPSIS"
echo "    internsctl [OPTIONS]"
echo ""
echo "DESCRIPTION"
echo "    This command performs XYZ operations."
echo ""
}

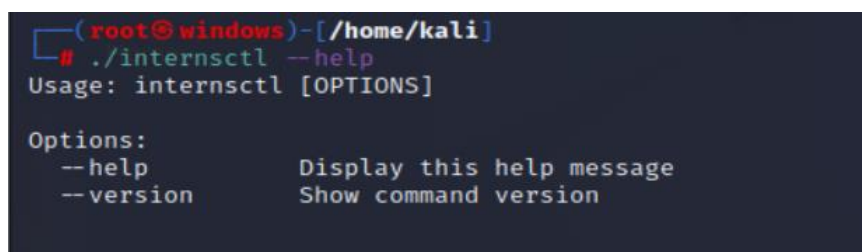
# Function to display command help display_help() {
echo "Usage: internsctl [OPTIONS]"
echo ""
echo "Options:"
echo "    --help          Display this help message"
echo "    --version       Show command version"
echo ""
}

# Parse command-line options case "$1" in
--help)
    display_help
    ;;
--version)
    echo "internsctl $command_version"
    ;;
*)
    ""
    display_manual
    ;;
esac

Manual page internsctl line 5/41 (END) (press h for help or q to quit)

```

2. To get help, execute `./internsctl --help`.



```

(root@windows)-[/home/kali]
# ./internsctl --help
Usage: internsctl [OPTIONS]

Options:
  --help          Display this help message
  --version       Show command version

```

3.To check the version, run `./internsctl --version`

```
(root@windows)-[/home/kali]
# ./internsctl --version
internsctl v0.1.0

(root@windows)-[/home/kali]
#
```

SECTION B

CODE

```
#!/bin/bash
```

```
# Define the command version
```

```
command_version="v0.1.0"
```

```
# Function to display command manual
```

```
display_manual() {
```

```
    echo "INTENSCTL(1)                User Commands                INTENSCTL(1)"
```

```
    echo ""
```

```
    echo "NAME"
```

```
    echo "    internsctl - Custom command for XYZ operations"
```

```
    echo ""
```

```
    echo "SYNOPSIS"
```

```
    echo "    internsctl [OPTIONS]"
```

```
    echo ""
```

```
    echo "DESCRIPTION"
```

```
    echo "    This command performs XYZ operations."
```

```
    echo ""
```

```
}
```

```
# Function to display command help
```

```
display_help() {
```

```
    echo "Usage: internsctl [OPTIONS]"
```

```

echo ""
echo "Options:"
echo " --help      Display this help message"
echo " --version   Show command version"
echo ""

echo "Part1"
echo " internctl cpu getinfo      Display CPU information (similar to lscpu)"
echo " internctl memory getinfo    Display memory information (similar to free)"
echo ""
echo "Part2"
echo " internctl user create <username>   Create a new user with home directory access"
echo " internctl user list             List all regular users"
echo " internctl user list --sudo-only    List users with sudo permissions"
echo ""
echo "Part3"
echo " internctl file getinfo <file-name>  Get detailed file information"
echo " Options:"
echo " --size, -s          Print file size"
echo " --permissions, -p   Print file permissions"
echo " --owner, -o         Print file owner"
echo " --last-modified, -m  Print last modified time"
echo ""
# Add more help information as needed for your command
}

# Function to handle CPU information retrieval
get_cpu_info() {
    lscpu
}

```

Function to handle memory information retrieval

```
get_memory_info() {  
    free  
}
```

Function to create a new user

```
create_user() {  
    if [ "$#" -ne 1 ]; then  
        echo "Usage: internsctl user create <username>"  
        exit 1  
    fi  
    sudo useradd -m "$1"  
}
```

Function to list all regular users

```
list_users() {  
    cut -d: -f1 /etc/passwd  
}
```

Function to list users with sudo permissions

```
list_sudo_users() {  
    grep -Po '^sudo.+:\K.*$' /etc/group | tr ',' '\n'  
}
```

Function to get file information

```
get_file_info() {  
    if [ "$#" -lt 2 ]; then  
        echo "Usage: internsctl file getinfo [options] <file-name>"  
        exit 1  
    fi
```

```
file_name="${@: -1}" # Get the last argument as the file name
```

```
# Check if the file exists
```

```
if [ ! -e "$file_name" ]; then
```

```
    echo "File not found: $file_name"
```

```
    exit 1
```

```
fi
```

```
echo "File: $file_name"
```

```
# Parse options
```

```
while [ "$#" -gt 1 ]; do
```

```
    case "$1" in
```

```
        --size|-s)
```

```
            echo -n "Size(B): "
```

```
            stat -c "%s" "$file_name"
```

```
            ;;
```

```
        --permissions|-p)
```

```
            echo -n "Access: "
```

```
            stat -c "%A" "$file_name"
```

```
            ;;
```

```
        --owner|-o)
```

```
            echo -n "Owner: "
```

```
            stat -c "%U" "$file_name"
```

```
            ;;
```

```
        --last-modified|-m)
```

```
            echo -n "Modify: "
```

```
            stat -c "%Y" "$file_name"
```

```
            ;;
```

```
        *)
```

```
            echo "Invalid option: $1"
```

```
        ;;
    esac
    shift
done
}
```

```
# Parse command-line options
```

```
case "$1" in
    cpu)
        shift
        get_cpu_info
        ;;
    memory)
        shift
        get_memory_info
        ;;
    user)
        shift
        case "$1" in
            create)
                shift
                create_user "$@"
                ;;
            list)
                shift
                if [ "$1" = "--sudo-only" ]; then
                    list_sudo_users
                else
                    list_users
                fi
            ;;
        esac
    ;;
esac
```



```

        ;;
    *)
        display_help
        ;;
esac

;;
file)
    shift
    if [ "$1" = "getinfo" ]; then
        shift
        get_file_info "$@"
    else
        display_help
    fi
    ;;
--help)
    display_help
    ;;
--version)
    echo "internsctl $command_version"
    ;;
*)
    display_manual
    ;;
esac

```

Part A

To get the Cpu information- ./internsctl cpu getinfo

```
root@windows: /home/kali
File Actions Edit View Help
(root@windows)-[/home/kali]
# ./internsctl cpu getinfo

Architecture:      x86_64
CPU op-mode(s):    32-bit, 64-bit
Address sizes:      40 bits physical, 48 bits virtual
Byte Order:         Little Endian
CPU(s):             4
On-line CPU(s) list: 0-3
Vendor ID:          GenuineIntel
BIOS Vendor ID:     GenuineIntel
Model name:          Intel(R) Core(TM) i5-8300H CPU @ 2.30GHz
BIOS Model name:     Intel(R) Core(TM) i5-8300H CPU @ 2.30GHz
CPU family:          6
Model:              158
Thread(s) per core: 1
Core(s) per socket: 2
Socket(s):           2
Stepping:            10
BogoMIPS:            4607.99
Flags:               fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss ht syscall nx rdtscp lm const
                    ant_tsc arch_perfmon nopl tsc_reliable nonstop_tsc cpuid tsc_known_freq pni pclmulqdq ssse3 fma cx16 sse4_1 sse4_2 movbe popcnt ae
                    s xsave avx hypervisor lahf_lm 3dnowprefetch pt1 arat

Virtualization features:
Hypervisor vendor:  VMware
Virtualization type: full
Caches (sum of all):
  L1d:                128 KiB (4 instances)
  L1i:                128 KiB (4 instances)
  L2:                  1 MiB (4 instances)
  L3:                  16 MiB (2 instances)
NUMA:
  NUMA node(s):        1
  NUMA node0 CPU(s):   0-3
Vulnerabilities:
  Itlb multihit:        KVM: Mitigation: VMX unsupported
  L1tf:                 Mitigation; PTI Inversion
  Mds:                  Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state unknown

Meltdown:           Mitigation; PTI
Spec store bypass:   Vulnerable
Spectre v1:          Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Spectre v2:          Mitigation; Full generic retpoline, STIBP disabled, RSB filling
Srbds:               Not affected
Tsx async abort:     Not affected

(root@windows)-[/home/kali]
```

Get memory information - `./internsctl memory getinfo`

```
(root@windows)-[/home/kali]
# ./internsctl memory getinfo

          total      used      free    shared  buff/cache   available
Mem:      4015756    625344    2559568     5832     830844    3153164
Swap:      998396         0     998396

(root@windows)-[/home/kali]
```

part 2

Create new user - `./internsctl user create admin`

```
(root@windows)-[/home/kali]
# ./internsctl user create admin

(root@windows)-[/home/kali]
```

List all regular users - `./internsctl user list`

```
(root@windows)-[/home/kali]
# ./internsctl user list

root
daemon
bin
sys
syncle System
games
man
lp
mail
news
uucp
proxy home
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
_apt
mysql
tss
strongswan
systemd-timesync
redsocks
rwhod
iodine
messagebus
miredo
_rpc
usbmux
tcpdump
rtkit

sshd
dnsmasq
statd
avahi
nm-openvpn
stunnel4
nm-openconnect
Debian-snmpp
speech-dispatcher
sshd
postgres
pulse
saned
inetsim
lightdm
colord
geoclue
king-phisher
kali
new_username
admin
```

To List user with user permission- `./internsctl user list --sudo-only`

```
(root@windows)-[/home/kali]
# ./internsctl user list --sudo-only

kali

(root@windows)-[/home/kali]
#
```

Part 3

Get file information- `./internsctl file getinfo filename`

```
(root@windows)-[/home/kali]
# ./internsctl file getinfo internsctl
File: internsctl
  File: internsctl
  Size: 4462          Blocks: 16          IO Block: 4096   regular file
Device: 801h/2049d   Inode: 4854545   Links: 1
Access: (0755/-rwxr-xr-x)  Uid: (  0/   root)   Gid: (  0/   root)
Access: 2024-01-10 06:23:08.187470772 -0500
Modify: 2024-01-10 06:23:01.402231814 -0500
Change: 2024-01-10 06:23:01.410246434 -0500
Birth: 2024-01-10 06:23:01.390209885 -0500

(root@windows)-[/home/kali]
#
```

For specific information- `./internsctl file getinfo --size --permissions --owner --last-modified internsctl`

```
(root@windows)-[/home/kali]
# ./internsctl file getinfo --size --permissions --owner --last-modified internsctl

File: internsctl
Size(B): 4228
Access: -rwxr-xr-x
Owner: root
Modify: 2024-01-10 06:35:35.481695585 -0500

(root@windows)-[/home/kali]
#
```