

## Task 1: Linux Command task

### Scenario :

There is a customer who came to you with a problem to have a custom linux command for his operations. Your task is to understand the problem and create a linux command via bash script as per the instructions.

Command name - internsctl

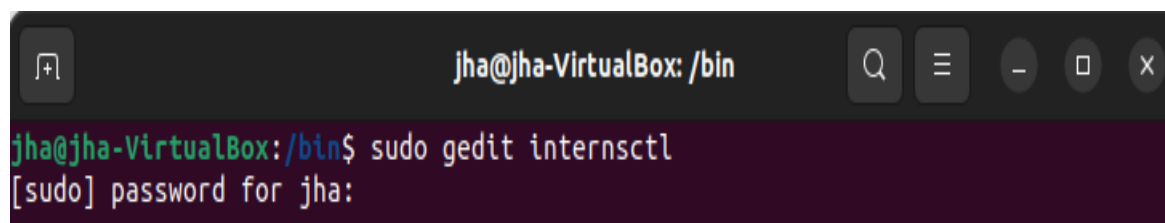
Command version - v0.1.0

### Section A:

Command creation:

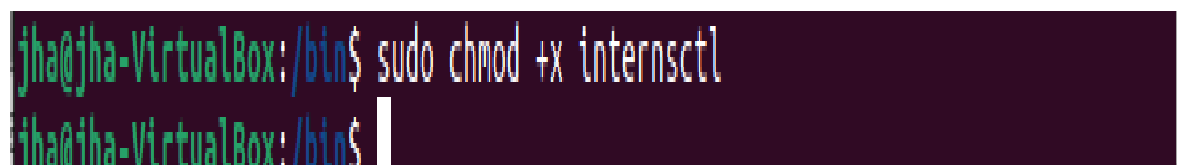
1. Open Bash terminal cd to Bin folder then write command:

`Sudo gedit internsctl`



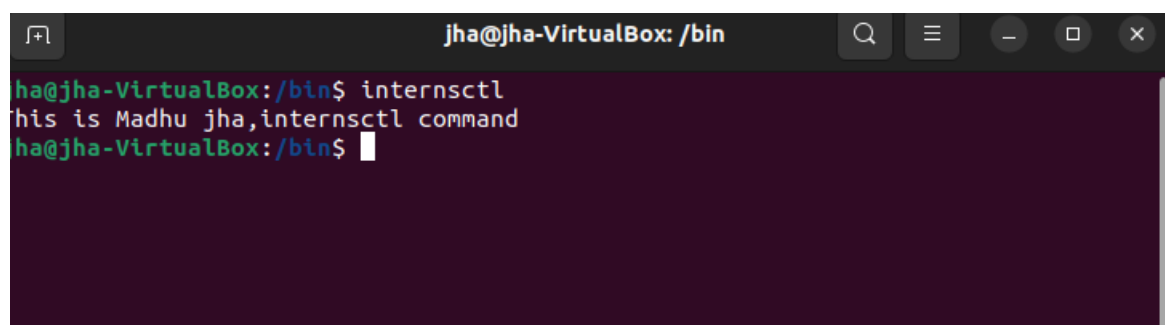
```
jha@jha-VirtualBox: /bin
jha@jha-VirtualBox:/bin$ sudo gedit internsctl
[sudo] password for jha:
```

2. `Sudo chmod +x internsctl`



```
jha@jha-VirtualBox: /bin$ sudo chmod +x internsctl
jha@jha-VirtualBox: /bin$
```

3. Run the command



```
jha@jha-VirtualBox: /bin$ internsctl
this is Madhu jha,internsctl command
jha@jha-VirtualBox: /bin$
```

## 4. Creating manual page

.\" Manpage for internsctl Command

.TH internsctl 1 "January 2024" "0.1.0" "internsctl Manual"

.SH NAME

internsctl \- Custom Linux command for operations

.SH SYNOPSIS

.B internsctl

[*\fIOPTION\fR*] [*\fICOMMAND\fR*] [*\fIARGUMENTS\fR*]

.SH DESCRIPTION

The *\fBinternsctl\fR* command is a custom Linux command for various system operations. It provides functionality to retrieve information about the CPU and memory, create and list users on the system.

.SH OPTIONS

.TP

.B \-*\-version*

Display the version information.

.SH COMMANDS

.TP

.B *cpu getinfo*

Get CPU information (similar to *lscpu*).

.TP

.B *memory getinfo*

Get memory information (similar to *free*).

.TP

.B *user create <username>*

Create a new user who can log in to the Linux system and access their home directory.

.TP

.B *user list [--sudo-only]*

List all regular users or users with sudo permissions.

.SH AUTHOR

Madhu Kumar Jha

```
jha@jha-VirtualBox:~$ sudo cp internsctl.1 /computer/usr/share/man/man1
[sudo] password for jha:
cp: cannot create regular file '/computer/usr/share/man/man1': No such file or directory
jha@jha-VirtualBox:~$ sudo cp internsctl.1 /usr/share/man/man1
jha@jha-VirtualBox:~$ 9771
9771: command not found
jha@jha-VirtualBox:~$ sudo mandb
Processing manual pages under /usr/share/man...
mandb: can't update index cache /var/cache/man/8402: No such file or directory
Updating index cache for path `/usr/share/man/man1'. Wait...mandb: warning: /usr/share/man/man1/thunderbird.1.gz: whatis parse for thunderbird(1) failed
Updating index cache for path `/usr/share/man/man3'. Wait...done.
Checking for stray cats under /usr/share/man...
Checking for stray cats under /var/cache/man...
Processing manual pages under /usr/share/man/de...
mandb: can't update index cache /var/cache/man/de/8402: No such file or directory
jha@jha-VirtualBox:~$
```

```
jha@jha-VirtualBox: ~
internsctl(1)      internsctl Manual      internsctl(1)

NAME
  internsctl - This internsctl command is created by madhu jha for xenon stack.

SYNOPSIS
  mycommand [OPTION]

DESCRIPTION
  It will show thw manual and how to use the internsctl command.

OPTIONS
  --version
    version="0.1.0"

AUTHOR
  Madhu Kumar Jha

0.1.0      January 2024      internsctl(1)
~
~
~
```

## 5. Creating -help command and --version command for this:

```
jha@jha-VirtualBox: /bin
jha@jha-VirtualBox:/bin$ internsctl
Usage: internsctl <command>

Commands:
  cpu getinfo      Get CPU information (similar to lscpu)
  memory getinfo   Get memory information (similar to free)
  user create <username> Create a new user
  user list        List all regular users
  user list --sudo-only List users with sudo permissions
jha@jha-VirtualBox:/bin$ internsctl --version
internsctl v0.1.0
jha@jha-VirtualBox:/bin$ internsctl --version
internsctl v0.1.0
jha@jha-VirtualBox:/bin$ internsctl --help
Usage: internsctl <command>

Commands:
  cpu getinfo      Get CPU information (similar to lscpu)
  memory getinfo   Get memory information (similar to free)
  user create <username> Create a new user
  user list        List all regular users
  user list --sudo-only List users with sudo permissions
jha@jha-VirtualBox:/bin$
```

## Section B: Level Easy

### 1. internctl cpu getinfo:

```
jha@jha-VirtualBox:/bin$ internctl getinfo
Usage: internctl <command>

Commands:
  cpu getinfo      Get CPU information (similar to lscpu)
  memory getinfo   Get memory information (similar to free)
  user create <username> Create a new user
  user list        List all regular users
  user list --sudo-only List users with sudo permissions
jha@jha-VirtualBox:/bin$
```

### 2. internctl memory getinfo:

```
jha@jha-VirtualBox:/bin$ internctl memory getinfo
              total        used        free      shared  buff/cache   available
Mem:          4694560      1837192       200600         64748       2656768       2525148
Swap:         1996796        14420       1982376
jha@jha-VirtualBox:/bin$
```

## Section c:Intermediate

### 1. internctl user create

```
jha@jha-VirtualBox:/bin$ internctl user create
Error: Please provide a username.
jha@jha-VirtualBox:/bin$ internctl user create madhu
[sudo] password for jha:
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
passwd: password updated successfully
User 'madhu' created successfully.
```

### 2. internctl user list

```
jha@jha-VirtualBox: /bin
user list      List all regular users
user list --sudo-only List users with sudo permissions
jha@jha-VirtualBox:/bin$ internctl user list
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
messagebus
```

### 3. \$ internsctl user list --sudo-only

```
jha@jha-VirtualBox:/bin$ internsctl user list --sudo only
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
gnats
nobody
systemd-network
systemd-resolve
messagebus
```

#### Workflow diagram:

