General instructions

1. The approach of solving the Problem solely depends on the Candidate
2. Make sure to have Draw.io diagrams for the workflowns and application architecture
3. Every configuration, code written should be pushed on git (Private Repo)
4. Your are not permitted to share the doc with anyone, even with your colleagues

Scenario There is a customer who came to you with a problem to have a <u>custom linux command</u> 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

1. I want a manual page of command so that I can see the full documentation of the command.

For example if you execute the command

`man ls`

as output we get the doc and usage guidelines. Similarly if I execute `man internsctl` I want to see the manual of my command.

2. Each linux command has an option `--help` which helps the end user to understand the use cases via examples. Similarly if I execute `internsctl  --help` it should provide me the necessary help

3. I want to see version of my command by executing

`internsctl --version`

Section B

I want to execute the following command for -

Part1 | Level Easy

I want to get cpu information of my server through the following command:

```
$ internsctl cpu getinfo
```

Expected Output -

I want similar output as we get from `lscpu` command

I want to get memory information of my server through the following command:

```
$ internsctl memory getinfo
```

Expected Output

I want similar output as we get from `free` command

Part2 | Level Intermediate

I want to create a new user on my server through the following command:

$ internsctl user create <username>

Note - above command should create user who can login to linux system and access his home directory

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I want to list all the regular users present on my server through the following command:

$ internsctl user list

If want to list all the users with sudo permissions on my server through the following command:

$ internsctl user list --sudo-only

Part3 | Advanced Level

By executing below command I want to get some information about a **file**

$ internsctl file getinfo <file-name>

Expected Output [make sure to have the output in following format only]

```
xenonstack@xsd-034:~$ internsctl file getinfo hello.txt

   File:     hellot.txt
 Access:     -rw-r--r--
Size(B):     5448
  Owner:     xenonstack
```

```
 Modify:    2020-10-07 20:34:44.616123431 +0530
```

In case I want only specific information then I must have a provision to use **options**

$ internsctl file getinfo [options] <file-name>

--size, -s to print size

--permissions, -p print file permissions

--owner, o print file owner

--last-modified, m

Expected Output with options

If I want to obtain the size of the specified file only, I should be able to use the following command:

```
xenonstack@xsd-034:~$ internsctl file getinfo --size hello.txt
5448
```

If I want to obtain the permissions of the specified file only, I should be able to use the following command:

```
xenonstack@xsd-034:~$ internsctl file getinfo --permissions hello.txt
-rw-r--r--
```

If I want to obtain the owner of the specified file only, I should be able to use the following command:

```
xenonstack@xsd-034:~$ internsctl file getinfo --owner hello.txt
xenonstack
```

If I want to obtain the last modified time of the specified file only, I should be able to use the following command:

```
xenonstack@xsd-034:~$ internsctl file getinfo --last-modified hello.txt
2020-10-07 20:34:44.616123431 +0530
```