LINUX

Section A

1. **Question: I want a manual page of the command so that I can see the full documentation of the command. Similarly, if I execute `man internsctl`, I want to see the manual of my command.**

    Answer:

    o   To achieve this, you need to create a manual page for your `internsctl` command. In the example script provided earlier, you can see the manual page content in a file named `internsctl.1`. To view the manual page, use the command: `man ./internsctl.1`

2. **Question: 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 with the necessary help.**

    Answer:

    o   The `display_help` function in the script handles the `-help` option. When you execute `internsctl --help`, it will display the usage guidelines and available options.

3. **Question: I want to see the version of my command by executing `internsctl --version`.**

    Answer:

    o   The `display_version` function in the script handles the `-version` option. When you execute `internsctl --version`, it will display the version information.

Section B

Part 1 | Level Easy

1. **Question: 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.**

    Answer:

    o   The `get_cpu_info` function in the script handles the `cpu getinfo` command. It uses the `lscpu` command internally to provide similar CPU information.

2. **Question: 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.**

    Answer:

- The `get_memory_info` function in the script handles the `memory getinfo` command. It uses the `free` command internally to provide similar memory information.

Part 2 | Level Intermediate

1. **Question: I want to create a new user on my server through the following command:** `$ internsctl user create <username>`. **Note - above command should create a user who can log in to the Linux system and access his home directory.**

   Answer:

   - The `create_user` function in the script handles the `user create <username>` command. It uses `sudo useradd -m` to create a new user with a home directory.

2. **Question: I want to list all the regular users present on my server through the following command:** `$ internsctl user list.`

   Answer:

   - The `list_users` function in the script handles the `user list` command. It uses `getent passwd` to list all regular users.

3. **Question: If I want to list all the users with sudo permissions on my server through the following command:** `$ internsctl user list --sudo-only.`

   Answer:

   - The `list_users` function with the `-sudo-only` option in the script filters and lists users with sudo permissions.

Part 3 | Advanced Level

1. **Question: By executing the 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 the following format only]**

   Answer:

   - The `get_file_info` function in the script handles the `file getinfo <file-name>` command. It uses `stat` to provide detailed file information in the specified format.

2. **Question: In case I want only specific information, then I must have a provision to use options:** `$ internsctl file getinfo [options] <file-name>.`

Answer:

- The `get_file_info` function with options in the script allows you to obtain specific information about a file using various options (`-size`, `-permissions`, `-owner`, `-last-modified`).
- **Example Commands:**
  - To obtain the size of the specified file only: `$ internsctl file getinfo --size hello.txt` outputs `5448`.
  - To obtain the permissions of the specified file only: `$ internsctl file getinfo --permissions hello.txt` outputs `rw-r--r--`.
  - To obtain the owner of the specified file only: `$ internsctl file getinfo --owner hello.txt` outputs `xenonstack`.
  - To obtain the last modified time of the specified file only: `$ internsctl file getinfo --last-modified hello.txt` outputs `2020-10-07 20:34:44.616123431 +0530`.