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SF- Experiment- 01

Aim: Explore the internal commands of Linux

Do the following

1. Display top 10 processes in descending order

```
$ ps | head
```

PID	PPID	PGID	WINPID	TTY	UID	STIME	COMMAND
976	975	976	15096	pty0	197609	07:46:46	/usr/bin/bash
986	976	986	2740	pty0	197609	07:47:14	/usr/bin/ps
975	1	975	15972	?	197609	07:46:46	/usr/bin/mintty
987	976	986	7672	pty0	197609	07:47:14	/usr/bin/bash

2. Display processes with highest memory usage.

```
ps -eo pid,%mem --sort=-%mem | head
```

PID	%MEM
573	1.6
494	1.2
844	0.7
874	0.7
847	0.6
536	0.5
627	0.4
950	0.4
918	0.4

3. Display current logged in user and logname.

```
$ whoami
ALISTAIR
```

```
who | cut -d' ' -f1 | sort | uniq
pi
```

```
$ id
uid=197609(ALISTAIR) gid=197609(ALISTAIR) groups=197609(ALISTAIR),401408(Medium Mandatory Level),545(Users),4(INTERACTIVE),66049(CONSOLE LOGON),11(Authenticated Users),15(This Organization),68496(MicrosoftAccount+shaanalistair47@gmail.com),113(Local account),4095(CurrentSession),66048(LOCAL),262180(Cloud Account Authentication)
```

4. Display current shell, home directory, operating system type, current path setting, current working directory.

Current Shell

```
$ echo $SHELL
/bin/bash
```

Current Working Directory

```
$ pwd  
/home/ALISTAIR
```

Operating System Type

```
cat /proc/version  
Linux version 5.10.63-v7l+ (dom@buildbot) (arm-linux-gnueabihf-gcc-8 (Ubuntu/Linaro 8.4.0-3ubuntu1) 8.4.0, GNU ld (GNU Binutils for Ubuntu) 2.34) #1496 SMP Wed Dec 1 15:58:56 GMT 2021
```

Current path setting

```
echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/local/games:/usr/games
```

Home directory

```
$ pwd  
/home/ALISTAIR
```

5. Display OS version, release number, kernel version

OS Version

```
$ uname -r  
3.1.7-340.x86_64
```

6. Illustrate the use of sort, grep, awk, etc. sort file1.txt grep "name" file1.txt

```
$ cat file1.txt  
My  
name  
is  
Alistair  
  
$ sort file1.txt  
Alistair  
My  
is  
name  
  
$ grep name file1.txt  
name
```