PLAGIARISM STATEMENT

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Date: 8 Nov 2020
Signature: AM

- man ls
- ls -a

- mkdir new
- cd new; cd ..
- whatis pwd
- whereis pwd
- pwd

- rmdir new
- passwd
- who
- whoami
- w
- last
- ps -u

- date
- cal
- pr -n

```
ananya@ananya-VirtualBox:~$ pr -n helloWorld.c


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    1    #include<stdio.h>
    2    #include<stdlib.h>
    3    int main(void){
    4    int i=1,j;
    5    //scanf("%d",&i);
    6    printf("Hello World - Ananya\n");
    7    for(i=1;i<100000000;i++){
    8    j=i*i;
    9    }
   10    return 0;
   11    }
```

- history
- factor 30030
- rev text.txt
- info rev
- grep -i

```
ananya@ananya-VirtualBox:~$ grep -i "hello" helloWorld.c
 printf("Hello World - Ananya\n");
```

- clear
- cat "file name" - displays contents of the file
  > - concatenate files content into another new file
  cat "file name" | "command" - input file to command
- mv "file name" - renames file
- rm "file name" - removes file
- file "file name" - type of file
- cp "file name" "new file name"- copies source file
- find "file name" - searches for file;
- find . -name '*.c' - files with extension .c
- cmp "file 1" "file 2" - compares two lines byte by byte, line by line
- head "file name"
- wd "file name" - number of lines, words, characters
- spell "file name" - spellcheck
- touch "file name" - create file; if already exists - edit mode, updates timestamps
- ln - creating soft links to files, filesystems, directories

```
ananya@ananya-VirtualBox:~$ ln -s text.txt link.txt
ananya@ananya-VirtualBox:~$ ls -al link.txt
lrwxrwxrwx 1 ananya ananya 8 Nov  8 01:52 link.txt -> text.txt
```

- gzip -c filename > filename.gz - file compression
- gzip -d filename.gz - file decompression

- alias ll='ls -al'

```
ananya@ananya-VirtualBox:~$ alias ll='ls -al'
ananya@ananya-VirtualBox:~$ ll
total 268
drwxr-xr-x 16 ananya ananya  4096 Nov  8 01:52 .
drwxr-xr-x  3 root   root    4096 Oct 31 15:59 ..
-rw-------  1 ananya ananya  2131 Nov  8 01:38 .bash_history
-rw-r--r--  1 ananya ananya   220 Oct 31 15:59 .bash_logout
```

  double quotes: the variable is resolved at definition time & single quotes: invocation time
- sort "file name"; ls | sort
- echo $SHELL
- chown (-R) "owner" "file"
- chmod (a,u,g,o)(+,-)(r,w,x)
- umask -S

```
ananya@ananya-VirtualBox:~$ umask -S
u=rwx,g=rwx,o=rx
```

- du -h - size of directory
- df -h - disk usage information
- basename (when you have path to a file/string pointing to a directory)
- dirname (when you have path to a file)
- top - displays dynamic real-time running processes

```
ananya@ananya-VirtualBox:~$ top

top - 13:23:15 up 11:22,  1 user,  load average: 0.29, 0.36, 0.25
Tasks: 182 total,   1 running, 181 sleeping,   0 stopped,   0 zombie
%Cpu(s):  9.6 us,  1.0 sy,  0.0 ni, 89.4 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   3936.4 total,    475.6 free,   1845.2 used,   1615.6 buff/cache
MiB Swap:    448.5 total,    447.2 free,      1.3 used.   1697.9 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
 1192 ananya    20   0 3803448 454980 128216 S   9.6  11.3  10:18.55 gnome-sh+
  951 ananya    20   0  286628 114420  69852 S   1.0   2.8   3:53.28 Xorg
   11 root      20   0       0      0      0 I   0.3   0.0   0:04.10 rcu_sched
  544 root      20   0  338384  21412  18384 S   0.3   0.5   0:07.11 NetworkM+
  929 ananya    20   0 3243864  20332  15936 S   0.3   0.5   0:52.20 pulseaud+
 1891 ananya    20   0 3115164 543524 217008 S   0.3  13.5   5:16.19 Web Cont+
    1 root      20   0  167692  11544   8332 S   0.0   0.3   0:04.15 systemd
    2 root      20   0       0      0      0 S   0.0   0.0   0:00.01 kthreadd
    3 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_gp
```

- kill(all) -(HUP, CONT, TERM, INT, KILL, STOP) "PID"
- uname -a
- tty
- free
- tail
- locate root
- jobs

- bg "jobid"
- fg "jobid"
- type ls

```
ananya@ananya-VirtualBox:~$ type ll
ll is aliased to `ls -al'
```

- which "command" - returns path to the command
- nohup "command" - let the process continue working even after you log out
- export
- env
- printenv
- ip addr
- "command 1" | xargs "command 2"
- ping google.com (stop with ctrl+c)
- traceroute google.com
- apropos uname
- pstree
- vi text.txt - vim editor
    1. insert mode - i
    2. moving - h-l for left-right, j-k for down-up
    3. save - :w
    4. save and quit - :wq
    5. quit without saving - :q!
- emacs "file name"
  To save: ctrl+x followed by ctrl+w