Assignment 1

Software Tools and Technologies

```
Name : Ravish Ranjan
Course : MCA
Semester : 1st semester
```

1. Listng wsl distros

wsl --list

2. Running wsl

wsl

3. Getting current working directory

pwd

4. Getting user info

whoami

5. Current running processes

ps

```
ravish@RavishPC:/mnt/c$ ps
    PID TTY          TIME CMD
   1149 pts/2    00:00:00 bash
   1202 pts/2    00:00:00 ps
ravish@RavishPC:/mnt/c$
```

6. Getting file/folder from folder

ls

```
ravish@RavishPC:/mnt/c$ ls
ls: cannot access 'DumpStack.log.tmp': Permission denied
ls: cannot access 'hiberfil.sys': Permission denied
ls: cannot access 'pagefile.sys': Permission denied
ls: cannot access 'swapfile.sys': Permission denied
'$Recycle.Bin'              DumpStack.log.tmp   'Program Files'
    Windows                 logUploaderSettings_temp.ini    work
 Config.Msi                 GitHub              'Program Files (x86)'
    XboxGames               pagefile.sys
 DUMP1e84.tmp               Intel                   ProgramData
    esp32                      ravish
 DUMP1f20.tmp               Microsoft               Recovery
    hiberfil.sys               sem1
'Documents and Settings'    MinGW               'System Volume Information
'   inetpub                    shellscripts
 DumpStack.log              PerfLogs                Users
    logUploaderSettings.ini   swapfile.sys
ravish@RavishPC:/mnt/c$
```

7. Getting file/folder info from folder

ls -l

```
ravish@RavishPC:/mnt/c/work$ ls -l
total 20
-rwxrwxrwx 1 ravish ravish 15709 Apr 15  2024 'adb commands.txt'
drwxrwxrwx 1 ravish ravish   512 Jul  7 09:41 'coding club'
-rwxrwxrwx 1 ravish ravish   345 Jul  2  2024 'cold msg.txt'
drwxrwxrwx 1 ravish ravish   512 Jul  7 09:41 maths
-rwxrwxrwx 1 ravish ravish   761 Sep 20 06:36 qrcode.png
drwxrwxrwx 1 ravish ravish   512 Sep 23 15:40 sem1
drwxrwxrwx 1 ravish ravish   512 Aug  2 17:36 'vs code'
ravish@RavishPC:/mnt/c/work$
```

8. Geting memory info

cat proc/meminfo

```
ravish@RavishPC:/mnt/c/work$ cat /proc/meminfo
MemTotal:        3894516 kB
MemFree:         3418472 kB
MemAvailable:    3420744 kB
Buffers:            1504 kB
Cached:           115900 kB
SwapCached:            0 kB
Active:            65100 kB
Inactive:         119812 kB
Active(anon):       2504 kB
Inactive(anon):    68508 kB
Active(file):      62596 kB
Inactive(file):    51304 kB
Unevictable:           0 kB
Mlocked:               0 kB
SwapTotal:       1048576 kB
SwapFree:        1048576 kB
Dirty:               120 kB
Writeback:             0 kB
AnonPages:         67508 kB
Mapped:            87652 kB
Shmem:              3504 kB
KReclaimable:      24812 kB
Slab:              64556 kB
SReclaimable:      24812 kB
SUnreclaim:        39744 kB
KernelStack:        2832 kB
PageTables:         2516 kB
SecPageTables:         0 kB
NFS_Unstable:          0 kB
Bounce:                0 kB
WritebackTmp:          0 kB
CommitLimit:     2995832 kB
Committed_AS:     463640 kB
```

9. Getting release of our iso

```
lsb_release -a
```

```
ravish@RavishPC:/mnt/c/work$ lsb_release -a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 24.04.3 LTS
Release:        24.04
Codename:       noble
ravish@RavishPC:/mnt/c/work$
```

10. Manual for grep command

```
man grep
```

```
GREP(1)                        User Commands                        GREP(1)

NAME
       grep, egrep, fgrep, rgrep - print lines that match patterns

SYNOPSIS
       grep [OPTION...] PATTERNS [FILE...]
       grep [OPTION...] -e PATTERNS ... [FILE...]
       grep [OPTION...] -f PATTERN_FILE ... [FILE...]

DESCRIPTION
       grep  searches  for  PATTERNS in each FILE.  PATTERNS is one or
       more patterns separated by newline characters, and grep  prints
       each line that matches a pattern.  Typically PATTERNS should be
       quoted when grep is used in a shell command.

       A  FILE of "-" stands for standard input.  If no FILE is given,
       recursive  searches  examine   the   working   directory,   and
       nonrecursive searches read standard input.

       Debian  also  includes  the  variant  programs egrep, fgrep and
       rgrep.  These programs are the same as  grep -E,  grep -F,  and
       grep -r, respectively.  These variants are deprecated upstream,
       but Debian provides for backward compatibility. For portability
       reasons,  it  is recommended to avoid the variant programs, and
       use grep with the related option instead.
```

11. Getting uptme of system

> uptime

```
ravish@RavishPC:/mnt/c/work$ uptime
 06:48:48 up 43 min,  1 user,  load average: 0.00, 0.04, 2.49
ravish@RavishPC:/mnt/c/work$
```

12. Getting hardware info

> sudo lshw

```
ravish@RavishPC:/mnt/c/github/os/bootloader$ sudo lshw
[sudo] password for ravish:
ravishpc
    description: Computer
    width: 64 bits
    capabilities: smp vsyscall32
  *-core
      description: Motherboard
      physical id: 0
    *-memory
        description: System memory
        physical id: 0
        size: 4GiB
    *-cpu
        product: Intel(R) Core(TM) i3-6006U CPU @ 2.00GHz
        vendor: Intel Corp.
        physical id: 1
        bus info: cpu@0
        version: 6.78.3
        width: 64 bits
```

13. Getting memory info

```
free -h
```

```
ravish@RavishPC:/mnt/c/work$ free -h
              total        used        free      shared  buff/cache   available
Mem:           3.7Gi       435Mi       3.3Gi       3.4Mi       148Mi       3.3Gi
Swap:          1.0Gi          0B       1.0Gi
ravish@RavishPC:/mnt/c/work$
```

14. Getting history of commands

```
history
```

```
ravish@RavishPC:/mnt/c/work$ history
    1  man
    2  clear
    3  man sudo
    4  man man
    5  clear
    6  e ravish.c
    7  clear
    8  ldd
    9  ldd -help
   10  ldd --help
   11  clear
   12  ls
   13  ls -l
   14  clear
   15  code .
   16  clear
   17  exit
   18  curl
   19  curl ascii.live/parrot
   20  clear
   21  exit
   22  sudo apt install tmux
   23  tmux
   24  clear
   25  cd ./GitHub/logisick/
   26  clear
   27  tmux
   28  exit
   29  clear
   30  sudo apt get redis
   31  sudo apt install redis
   32  clear
   33  redis-server
   34  clear
```