

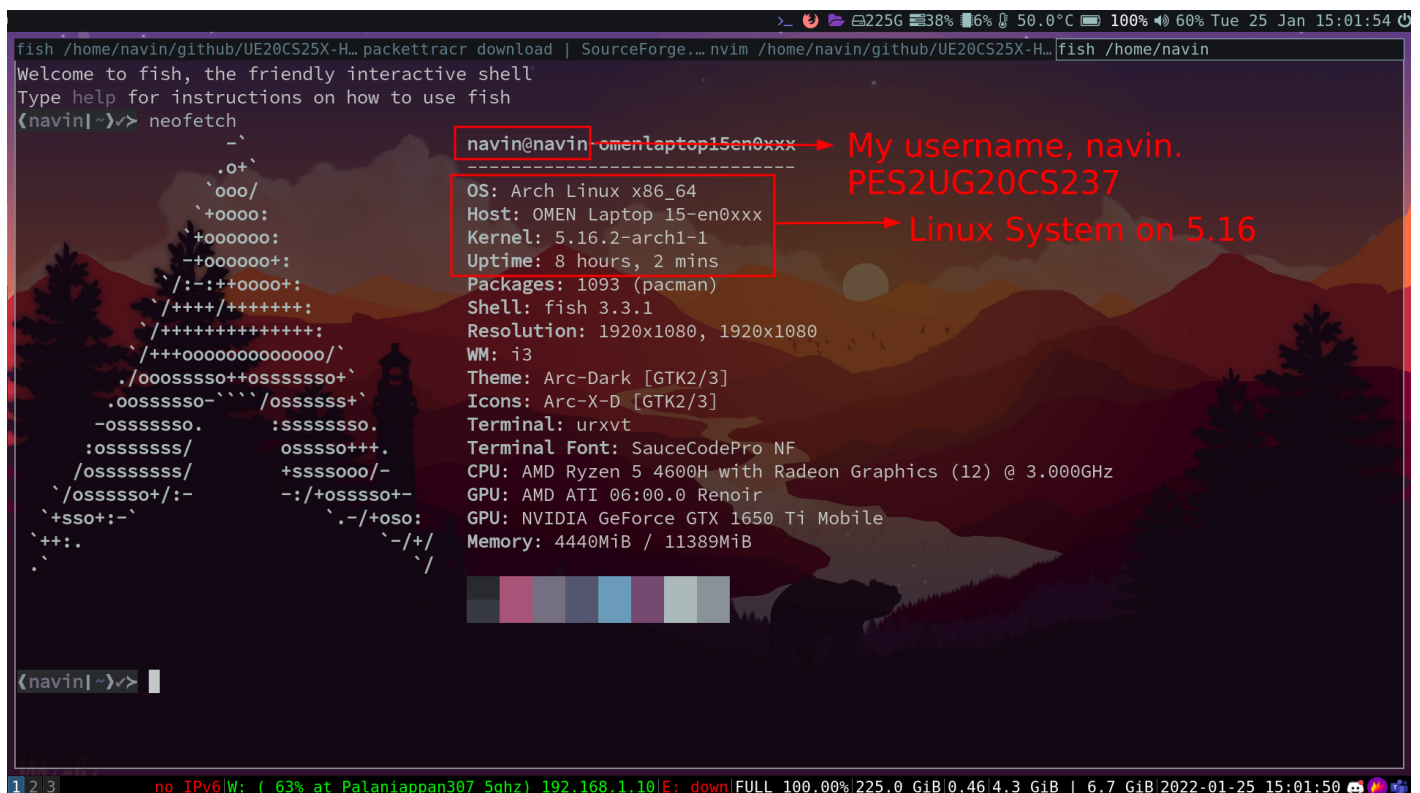
submission-1.md

OS Lab Week -1

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🌀 Task-1 : Create a Linux system

I have not created a VM as I run linux as my main os, a screenshot showing the same is attached below :



Task-2 : Installing C compiler

I am using a different flavour of linux called arch linux [As indicated in previous screenshot]. Hence the package manager use is pacman instead of apt. Screenshot :

```
(navin|~)~> sudo pacman -S gcc
[sudo] password for navin:
warning: gcc-11.1.0-3 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...

Package (1)  Old Version  New Version  Net Change  Download Size
core/gcc     11.1.0-3     11.1.0-3     0.00 MiB    33.93 MiB

Total Download Size:    33.93 MiB
Total Installed Size:  151.43 MiB
Net Upgrade Size:       0.00 MiB

:: Proceed with installation? [Y/n]
:: Retrieving packages...
gcc-11.1.0-3-x86_64      33.9 MiB  14.3 MiB/s  00:02 [-----] 100%
(1/1) checking keys in keyring [-----] 100%
(1/1) checking package integrity [-----] 100%
(1/1) loading package files     [-----] 100%
(1/1) checking for file conflicts [-----] 100%
:: Processing package changes...
(1/1) reinstalling gcc          [-----] 100%
:: Running post-transaction hooks...
(1/3) Arming ConditionNeedsUpdate...
(2/3) Checking which packages need to be rebuilt
(3/3) Updating the info directory file...
(navin|~)~>
```

🔗 Task-3 : creation of sample program

Screenshots for writing [Using neovim(nvim) instead of vim], compiling and execution screenshots :

```

nvim /home/navin/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/
1  lprog.c x
3  #include<stdio.h>
2
1  int main(){
4    printf("Hello world! \n ");
1  }

set-1/lprog.c
"set-1/lprog.c" 5L, 65C written
4,31 ALL

```

Using nvim to write the program

Program name

```

<navin|~>x> cd github/
<navin|~/github>v> cd UE20CS25X-HandsOn/
<navin|~/github/UE20CS25X-HandsOn(git:main)>v> cd UE20CS254-OSLAB/
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB(git:main)>v> dir
set-1
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB(git:main)>v> nvim
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB(git:main)>v> cd set-1/
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> gcc *.c
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> ./a.out
Hello world!
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v>

```

Username as proof of execution

Compiling and executing program

output of above program

Task-4 : 5 linux shell commands

```

<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>x> ./a.out | ps -ef | grep a.out
navin 112737 104038 0 20:55 pts/1 00:00:00 [a.out] <defunct>
navin 112739 104038 0 20:55 pts/1 00:00:00 grep --color=auto a.out
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> cat lprog.c
#include<stdio.h>

int main(){
    printf("Hello world! \n ");
}
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> touch testfile.txt
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> ls -a
. . 1_1.png 1_2.png 1_3.png 1_4.png lprog.c a.out submission-1.md submission-2.md testfile.txt
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> rm testfile.txt
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v> ls
1_1.png 1_2.png 1_3.png 1_4.png lprog.c a.out submission-1.md submission-2.md
<navin|~/github/UE20CS25X-HandsOn/UE20CS254-OSLAB/set-1(git:main)>v>

```

getting info about a.out and executing it using pipe

reading contents of the file

creating new file

contents of current directory

removing previously created file

