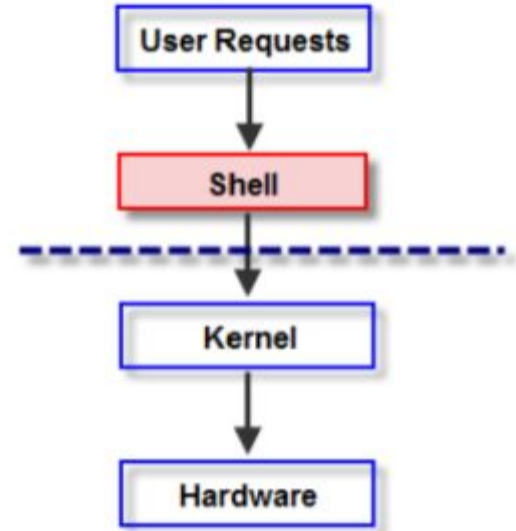


A WAY FORWARD!!

**Introduction to Scripting vs Operating System
(Just a brief Idea!!
You Still have much more to explore!!)**

UNIX - A BASIS FOR MANY OS

- User Interacts with the Unix/Linux System.
- Read User's Input
- Parse It , Evaluate It
- Works with kernel to execute the command.



IN LINUX, EVERYTHING IS A FILE!



Basic Commands

→ General Syntax

<Some Command> [option 1] [option 2] ...[option n]

THE BASIC ONES!!

The List command

`ls [flags] [file]`

- Lists directory content
- Flags/options: `-l`, `-a`, `-s`, `-S`, `-t` `-R`...



Tip

Explore the different combinations of flags with `ls` command, and see how it works.

-

THE BASIC ONES!!

Change Directory
`cd [dir]`

Know your System
`echo $SHELL`

Creating Files
`touch [flags] <file> (easiest way)`

- If the file exists, timestamp modified.
- If not, the file is created.



Tip

Explore the different know your system commands(who, man, etc), and see how it works.

-

THE BASIC ONES!!

`mkdir [flags] <dir name>`

- Creates a directory with the name <dir name>.

View + Concatenate

`cat <file>`

`cat <file1> <file2> ...<file n>`

Copy

`cp [flags] <file> <destination>`

- Copies the file <file> to a location <destination>.
- Use -r flag to copy an entire directory.

Tip

Try how to remove the directory already created.

How does this will go with files??(cat,

See how recursive copy works?

-

AND THERE ARE MANY MORE!

REFERENCES :

<http://www.tutorialspoint.com/unix/unix-useful-commands.htm>

<https://www.tjhsst.edu/~dhyatt/superap/unixcmd.html>

And **THE UNIX GOD!!**

The manual command `man <section> <command>`

- Displays the manual page (man page) of `<command>`.
- Use `/<keyword>` to do a keyword search in a manpage
- Make man your best friend!



Tip

Explore how you can tweak things in your systems.

Permission? See for them?

Absolute vs Relative Paths



* Explore the Header Files

Explore the system calls mentioned in tutorial

- Open, Close??
- Read, write?
- Mkdir, access?
- Scandir, readdir, closedir?

How will use them in C/C++ Program??

BASIC COMMANDS! WHAT ELSE IS LEFT!! ??

I/O REDIRECTION?????

HOW TO START??

IMPLEMENT GIVEN COMMANDS USING SYSTEM CALLS!



Tip

Explore Given
Commands - Wc, Tr,
Split+Tac

How they work on
terminal, What all they
are used for.



Tip

Wc??

Split + Tac??

TR?

How input will be given
through C code??

TR?

```
$ tr [OPTION] [SET1] [SET2]
```

```
< [Input File] > [output file]
```

< - Input Redirection

> - Output Redirection

HANDLE PROPERLY!!

COMMAND LINE ARGUMENTS??

INPUT OUTPUT FILE

IF INPUT OR OUTPUT NOT GIVEN??

STANDARD INPUT???

SCALABLE??

LARGE FILES!!!

QUESTIONS??

Thank You!!



Advice

Don't Copy AT ALL!! We know how "Smartest" you can be!!

Explore How System Calls and Coding go together

Start Early!!